OIPE JC71
APR 0 1 2005
PATENT & TRADEMARK OFFICE

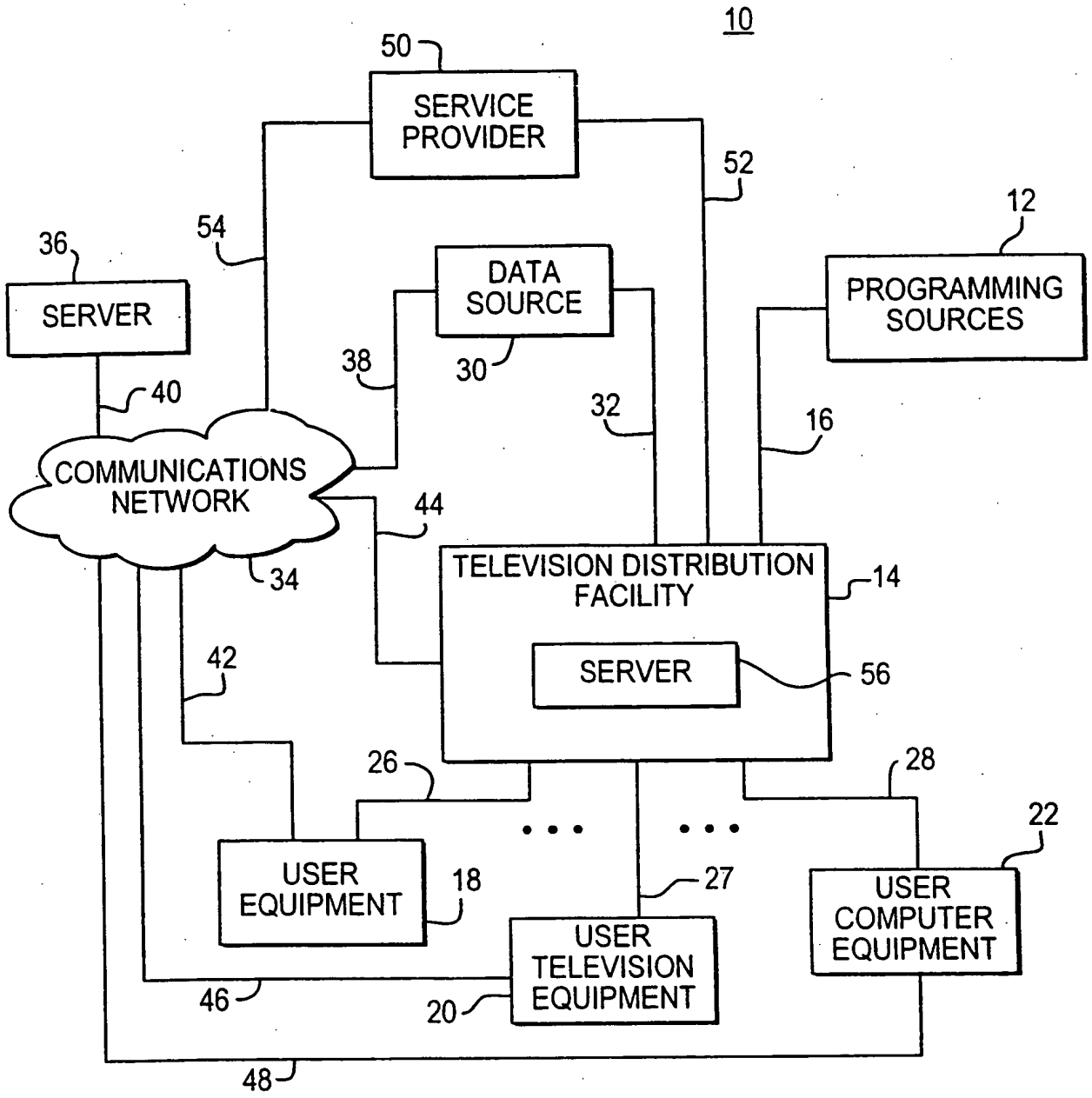


FIG. 1

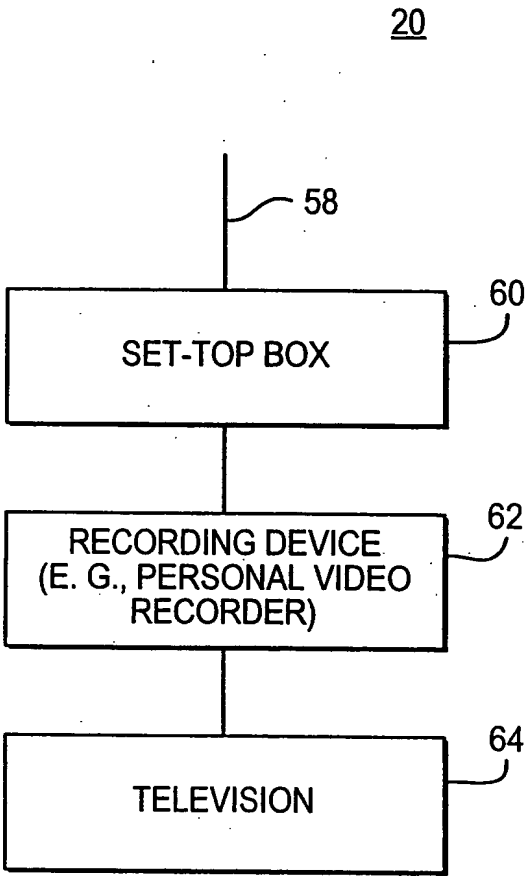

20
58
60
SET-TOP BOX
62
RECORDING DEVICE
(E. G., PERSONAL VIDEO
RECORDER)
64
TELEVISION

FIG. 2

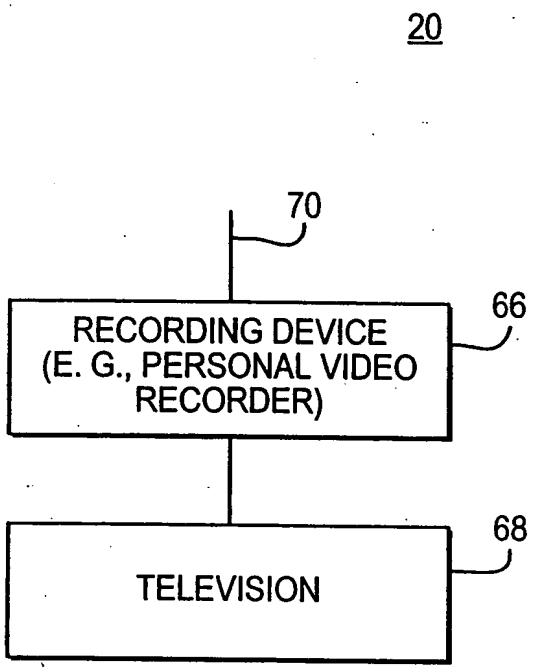

20
70
RECORDING DEVICE (E. G., PERSONAL VIDEO RECORDER)
66
TELEVISION
68

FIG. 3

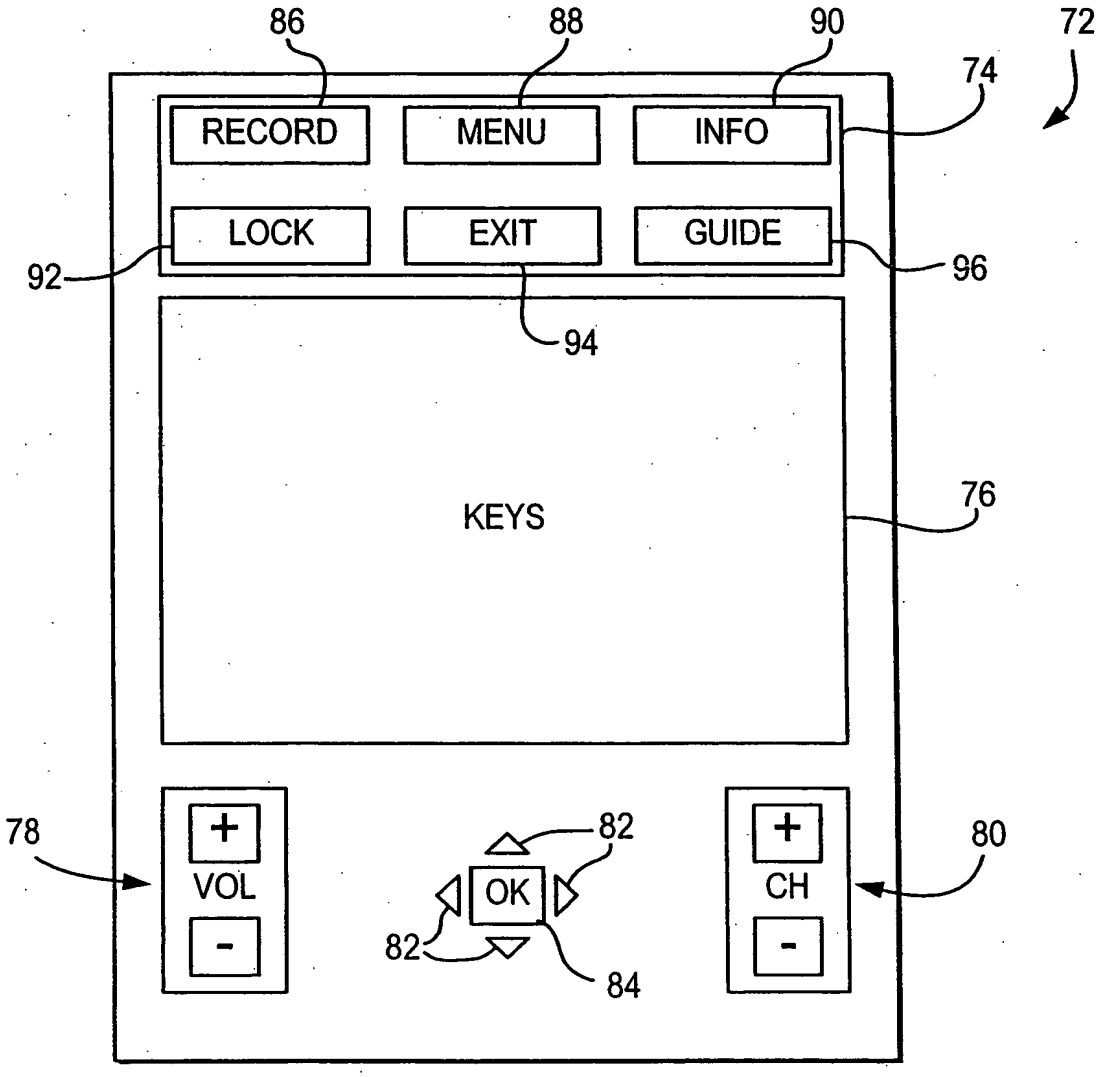

86
88
90
72
74
RECORD
MENU
INFO
LOCK
EXIT
GUIDE
92
96
94
KEYS
76
78
+
VOL
-
82
OK
82
84
+
CH
-
80

FIG. 4

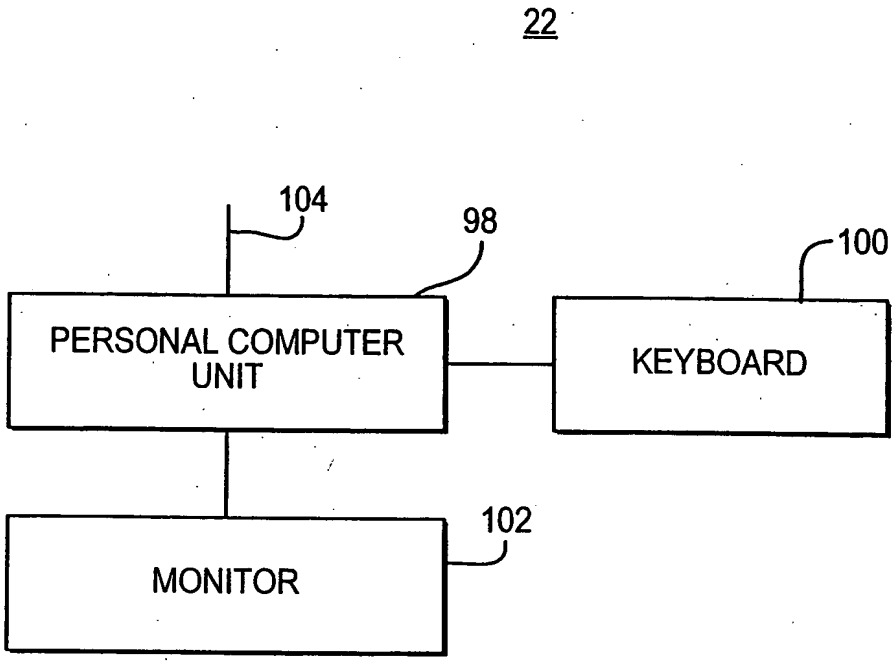


FIG. 5

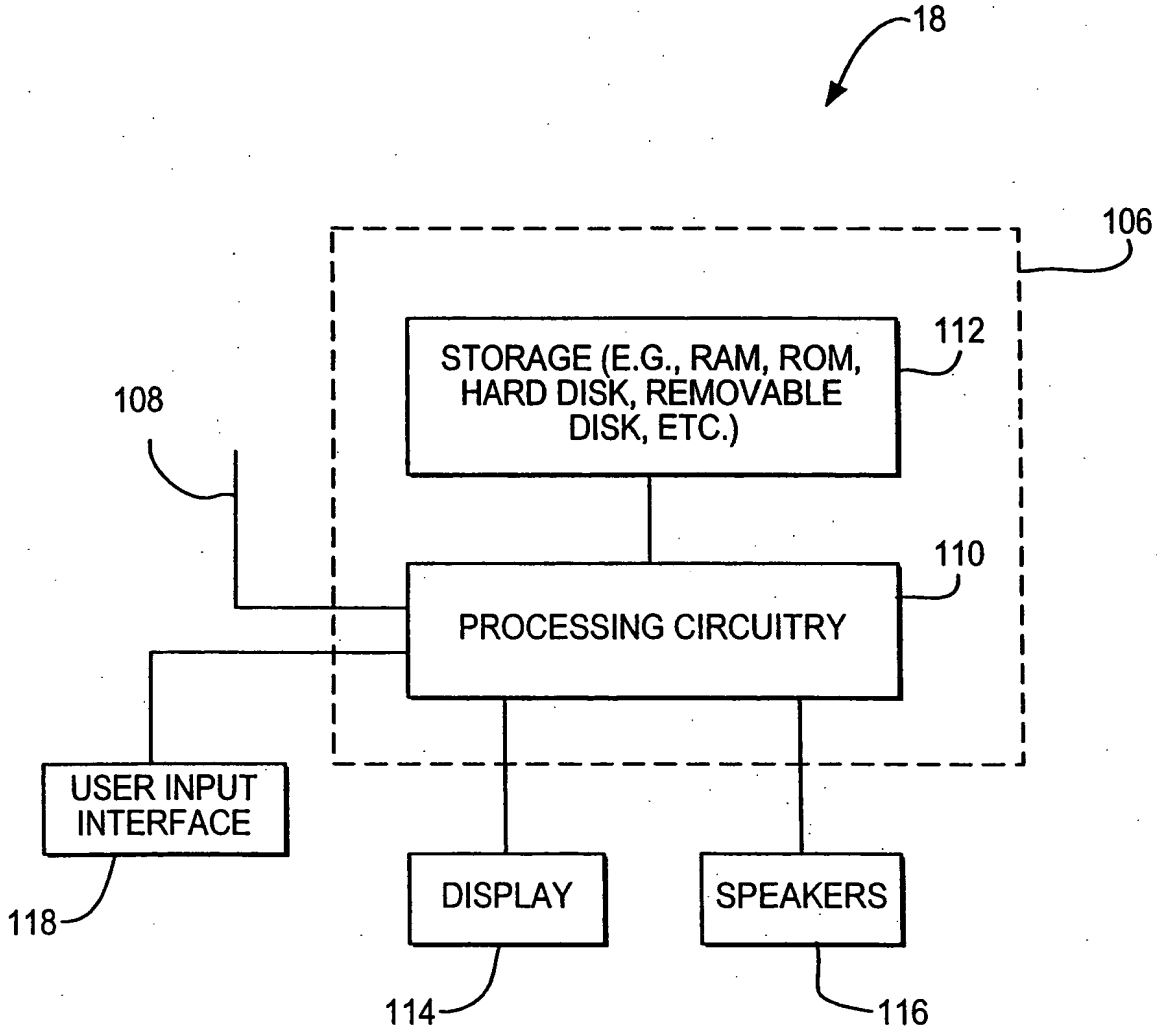

18
106
STORAGE (E.G., RAM, ROM, HARD DISK, REMOVABLE DISK, ETC.)
112
108
110
PROCESSING CIRCUITRY
USER INPUT INTERFACE
118
DISPLAY
SPEAKERS
114
116

FIG. 6

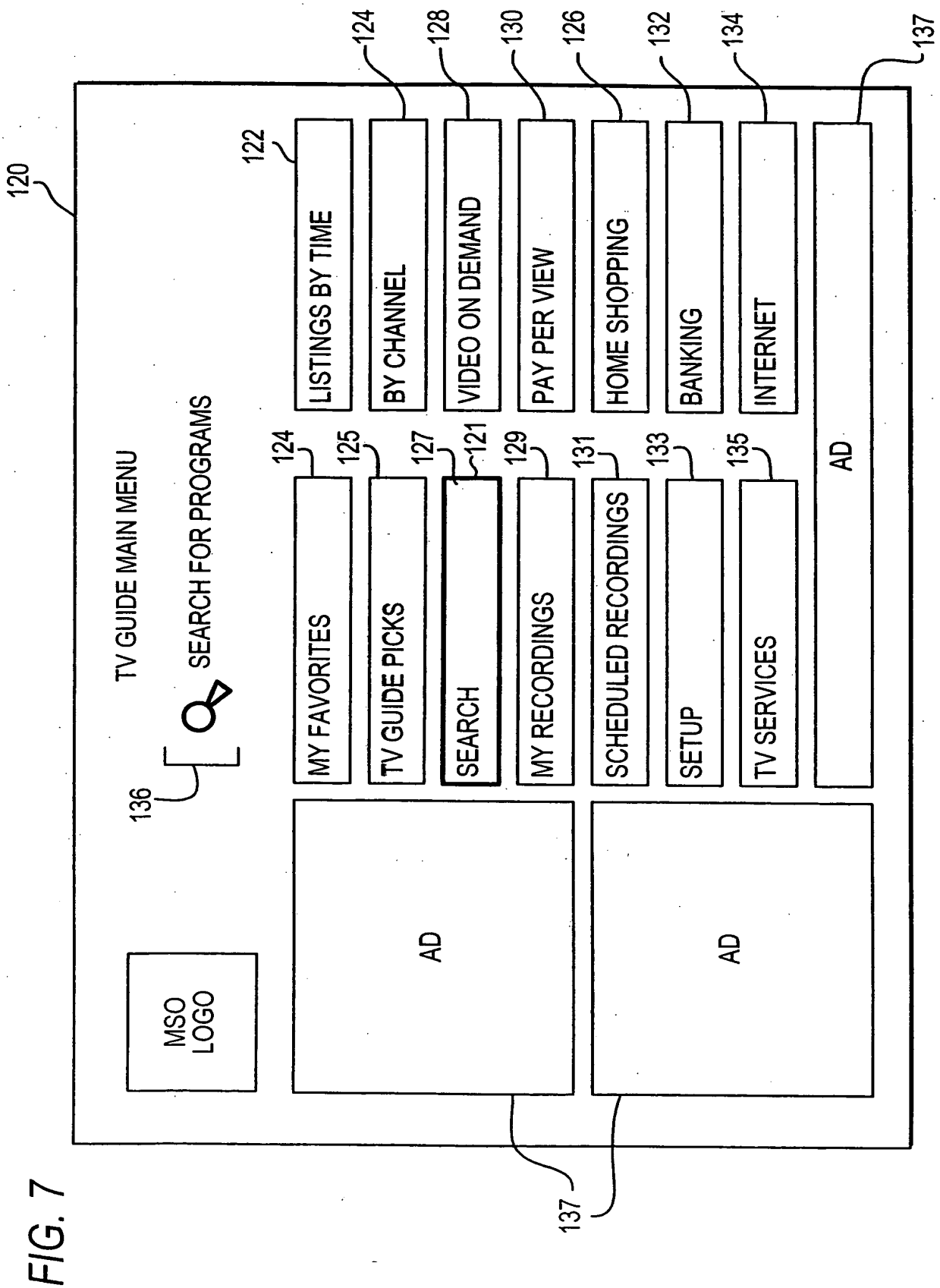

120
122
124
128
130
126
132
134
137
LISTINGS BY TIME
BY CHANNEL
VIDEO ON DEMAND
PAY PER VIEW
HOME SHOPPING
BANKING
INTERNET
AD
TV GUIDE MAIN MENU
SEARCH FOR PROGRAMS
136
124
125
127
121
129
131
133
135
MY FAVORITES
TV GUIDE PICKS
SEARCH
MY RECORDINGS
SCHEDULED RECORDINGS
SETUP
TV SERVICES
AD
MSO LOGO
AD
AD
137
137

FIG. 7

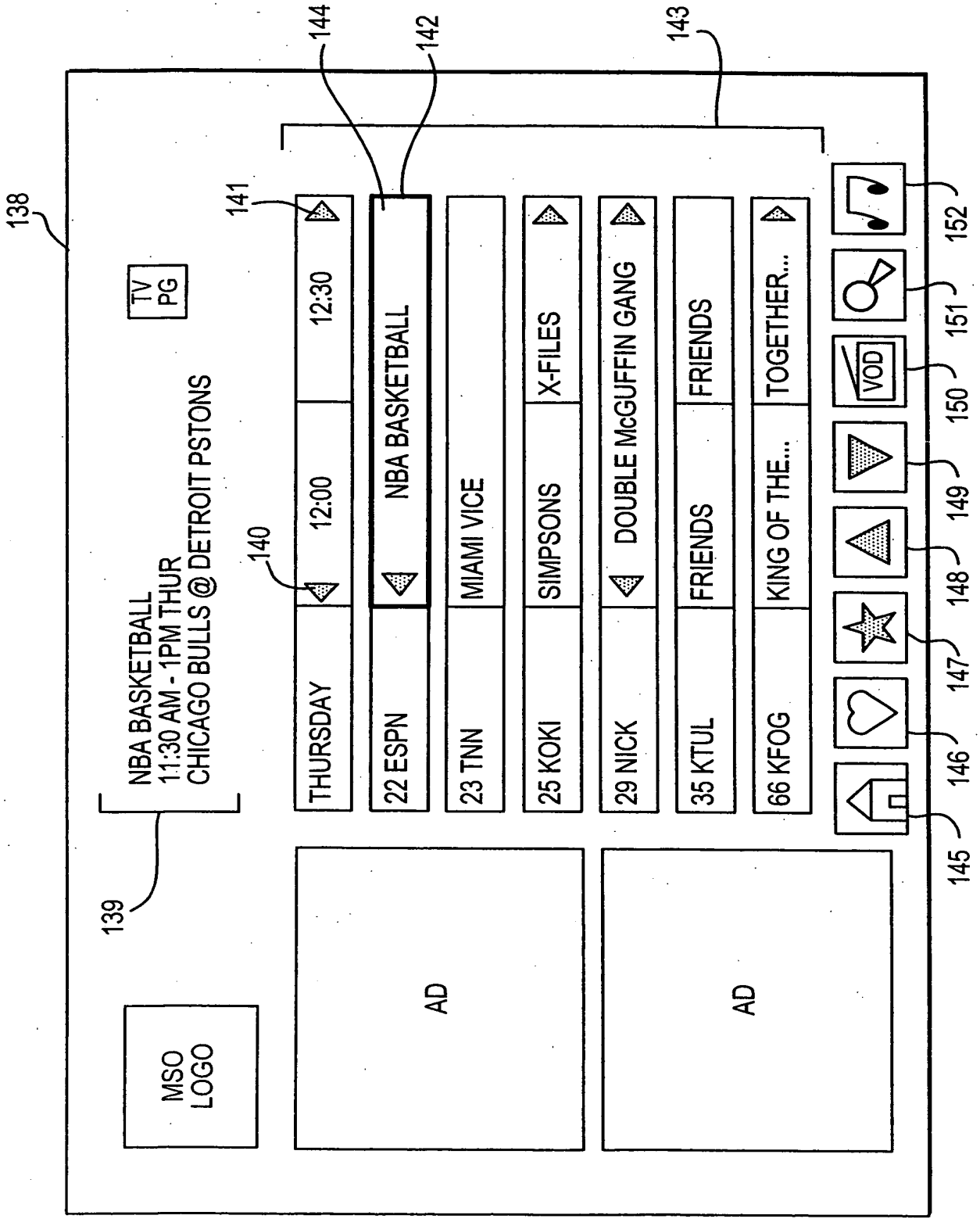

138
144
142
143
141
152
151
150
149
148
147
146
145
140
139
TV PG
NBA BASKETBALL
11:30 AM - 1PM THUR
CHICAGO BULLS @ DETROIT PSTONS
THURSDAY
12:00
12:30
22 ESPN
NBA BASKETBALL
23 TNN
MIAMI VICE
25 KOKI
SIMPSONS
X-FILES
29 NICK
DOUBLE McGUFFIN GANG
35 KTUL
FRIENDS
FRIENDS
66 KFOG
KING OF THE...
TOGETHER...
VOD
MSO LOGO
AD
AD

FIG. 8

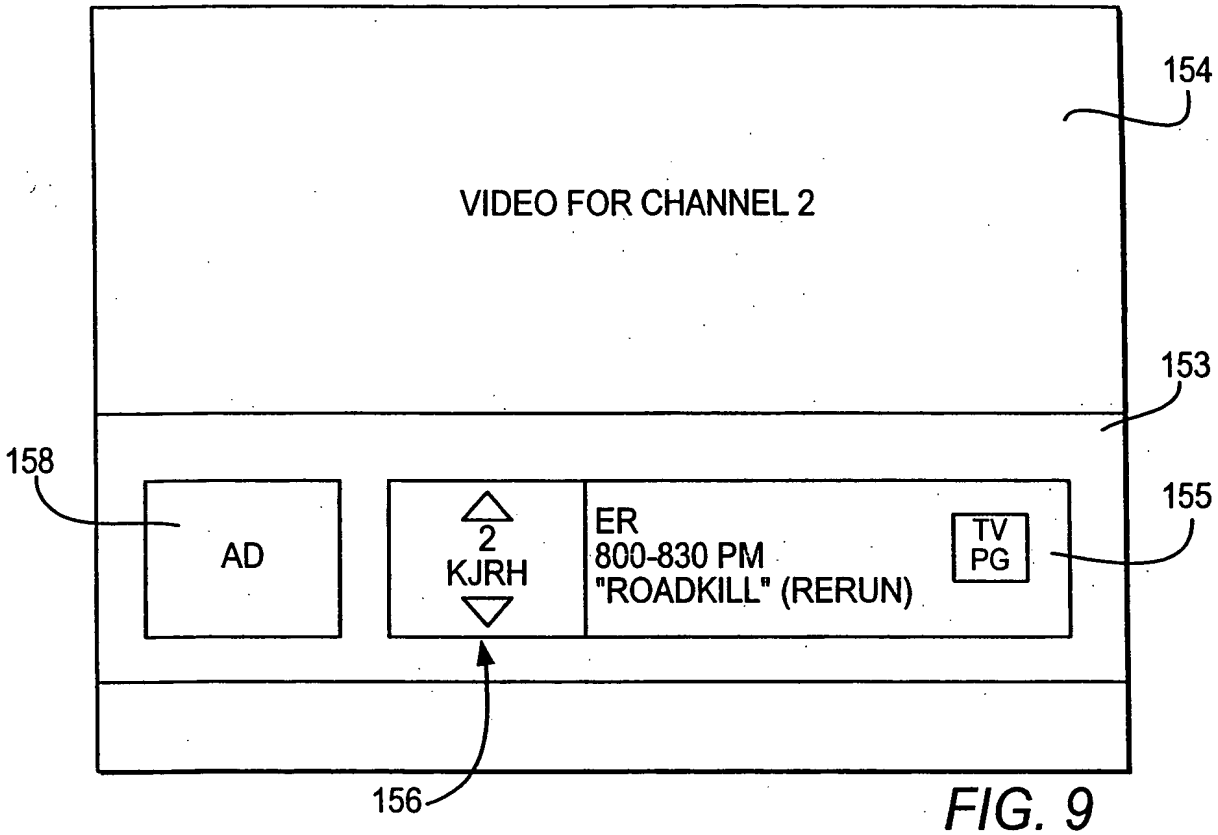

154
VIDEO FOR CHANNEL 2
153
158
AD
2
KJRH
ER
800-830 PM
"ROADKILL" (RERUN)
TV
PG
155
156

FIG. 9

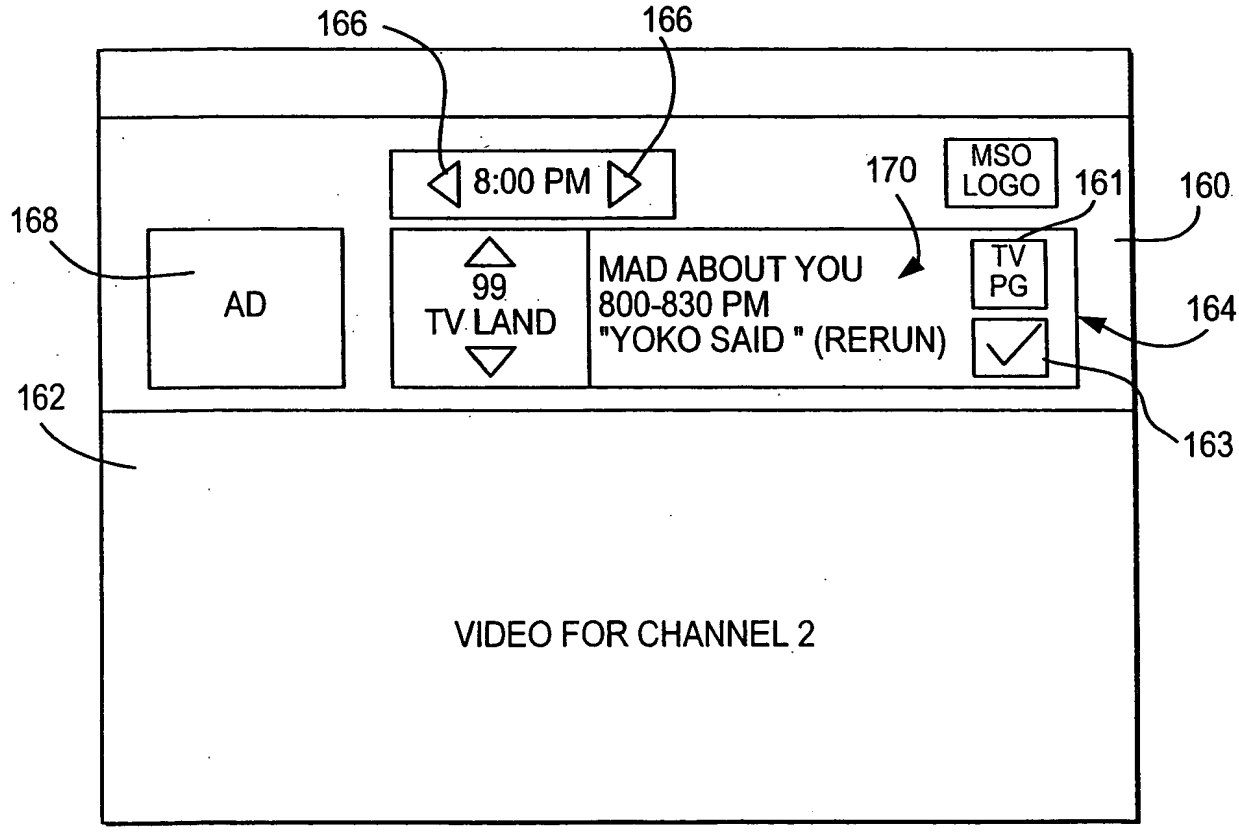

166
166
8:00 PM
170
MSO
LOGO
161
160
168
AD
99
TV LAND
MAD ABOUT YOU
800-830 PM
"YOKO SAID " (RERUN)
TV
PG
164
162
163
VIDEO FOR CHANNEL 2

FIG. 10

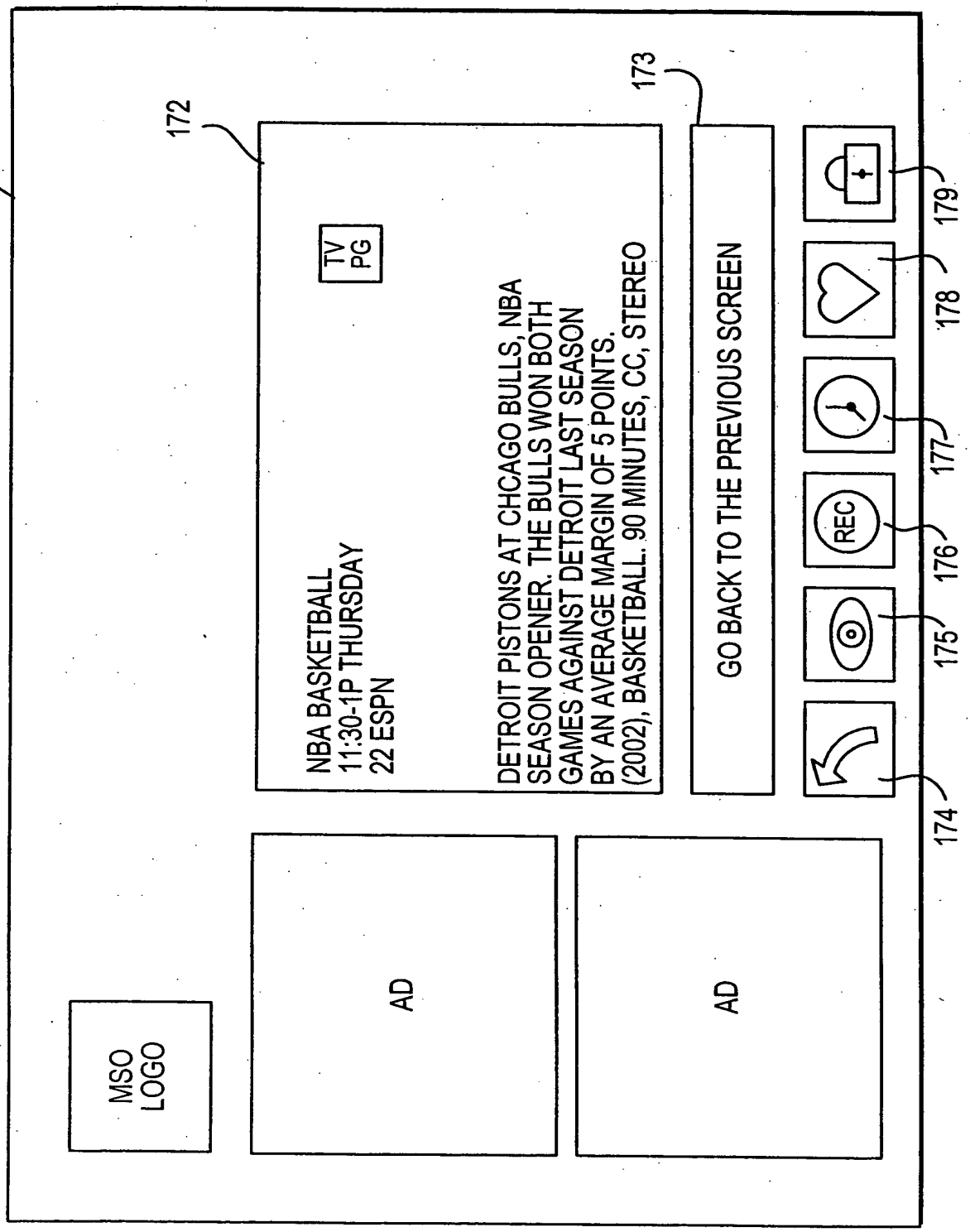

171
172
173
NBA BASKETBALL
11:30-1P THURSDAY
22 ESPN
TV
PG
DETROIT PISTONS AT CHCAGO BULLS, NBA
SEASON OPENER. THE BULLS WON BOTH
GAMES AGAINST DETROIT LAST SEASON
BY AN AVERAGE MARGIN OF 5 POINTS.
(2002), BASKETBALL. 90 MINUTES, CC, STEREO
GO BACK TO THE PREVIOUS SCREEN
REC
174
175
176
177
178
179
MSO
LOGO
AD
AD

FIG. 11

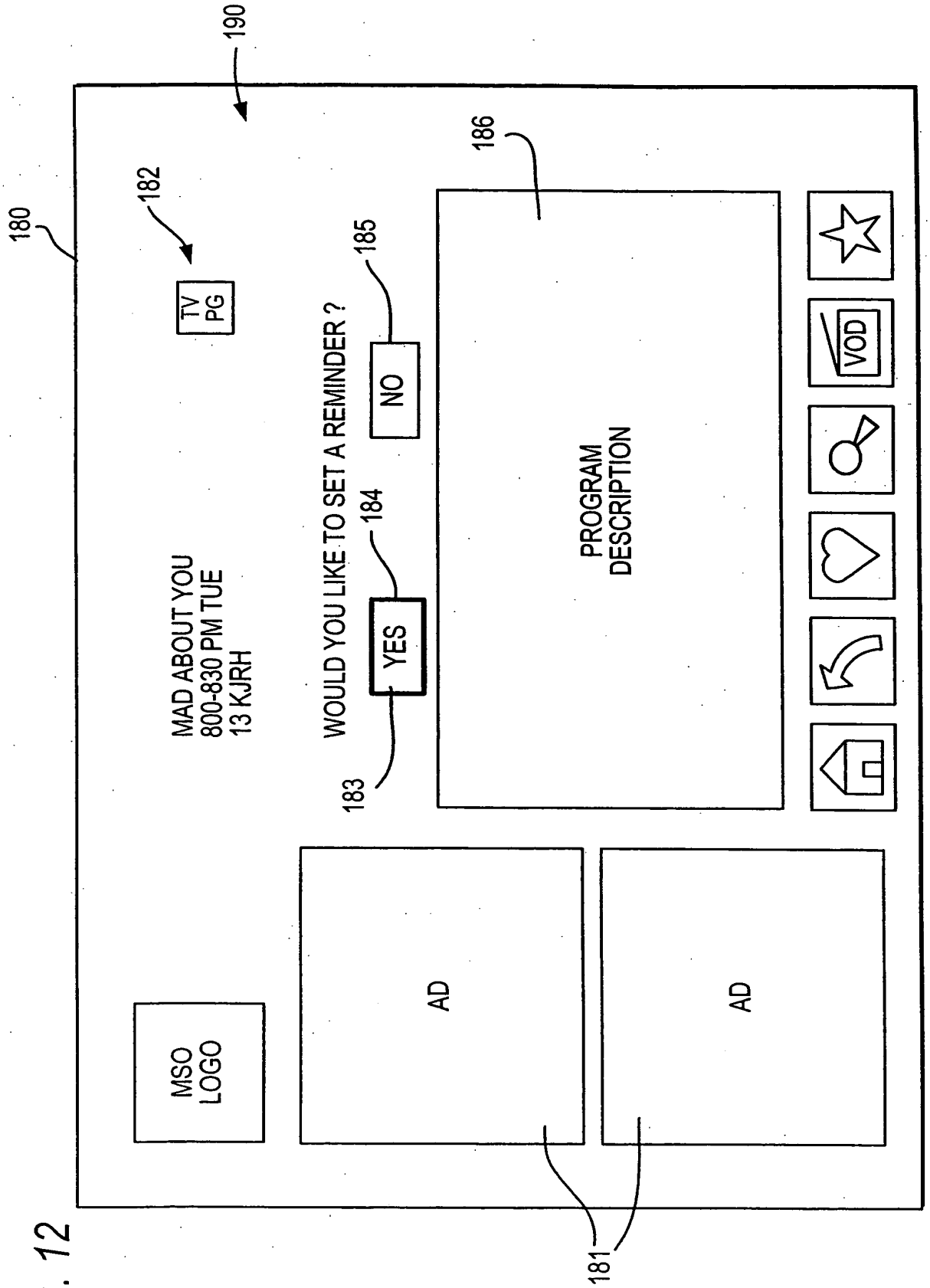

190
180
182
TV PG
185
NO
186
PROGRAM DESCRIPTION
VOD
MAD ABOUT YOU
800-830 PM TUE
13 KJRH
WOULD YOU LIKE TO SET A REMINDER ?
184
YES
183
MSO LOGO
AD
AD
181

FIG. 12

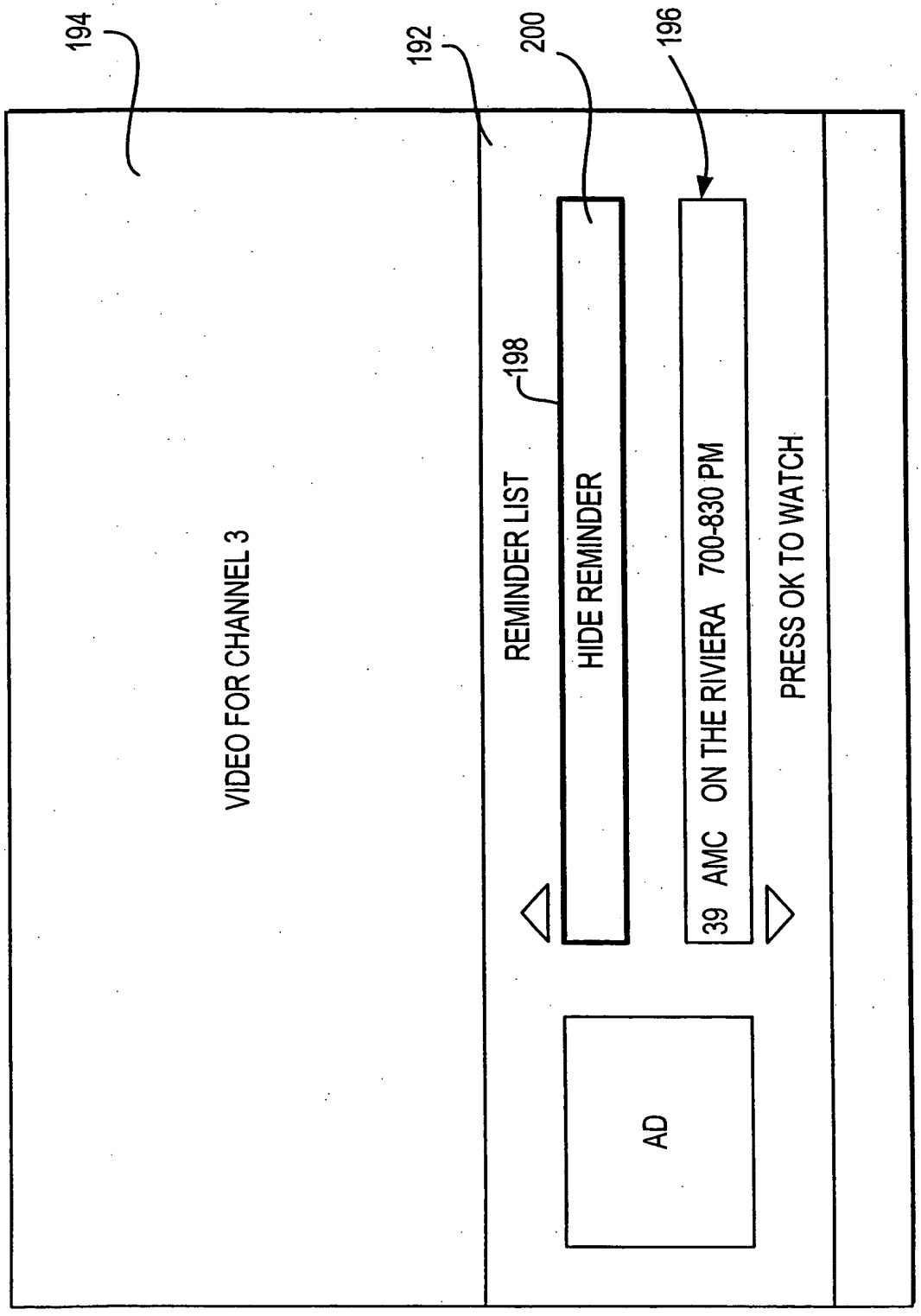

194
192
200
196
198
VIDEO FOR CHANNEL 3
REMINDER LIST
HIDE REMINDER
39 AMC ON THE RIVIERA 700-830 PM
PRESS OK TO WATCH
AD

FIG. 13

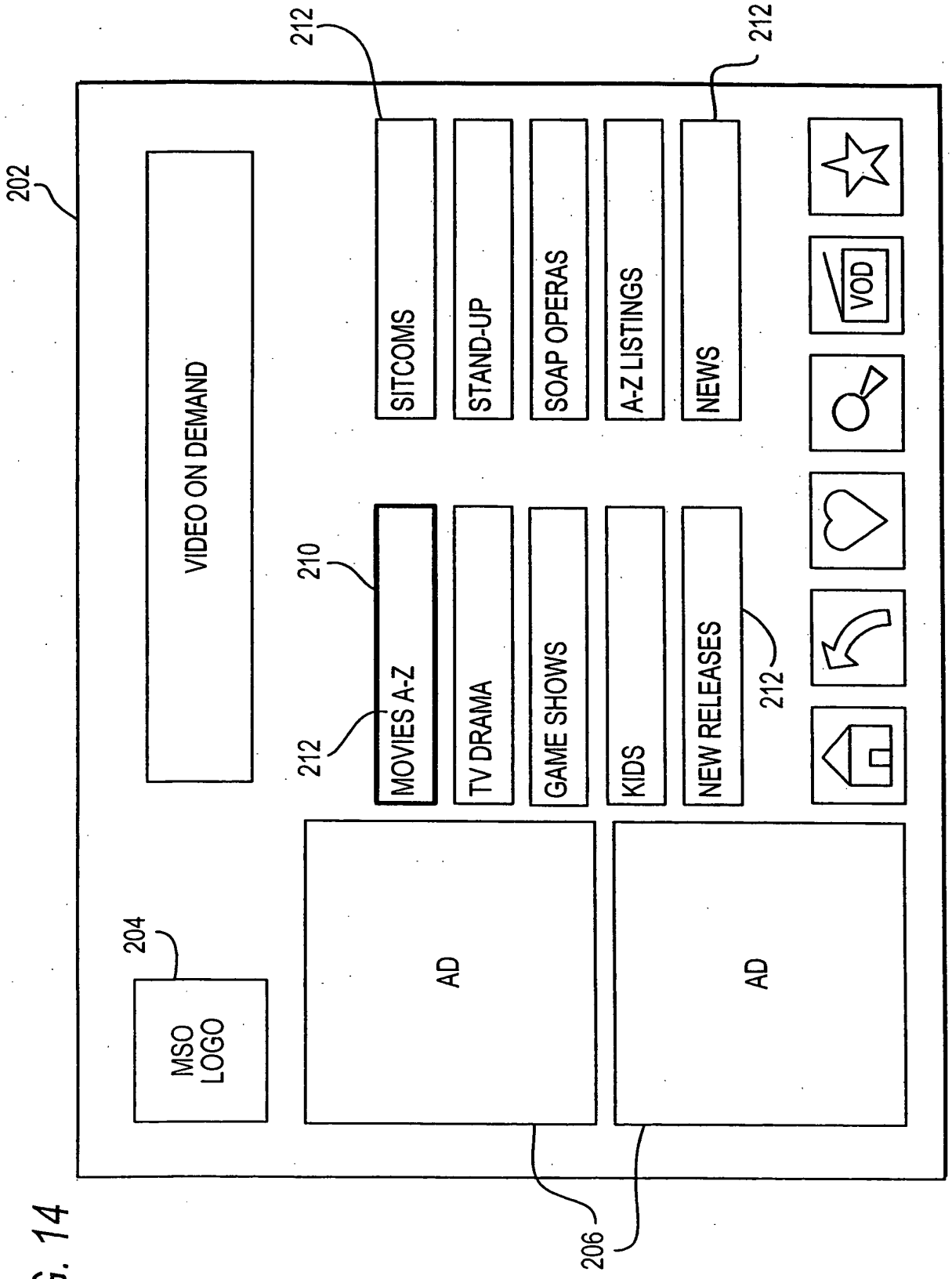

202
212
212
VIDEO ON DEMAND
SITCOMS
STAND-UP
SOAP OPERAS
A-Z LISTINGS
NEWS
VOD
210
212
MOVIES A-Z
TV DRAMA
GAME SHOWS
KIDS
NEW RELEASES
212
204
MSO LOGO
AD
AD
206

FIG. 14

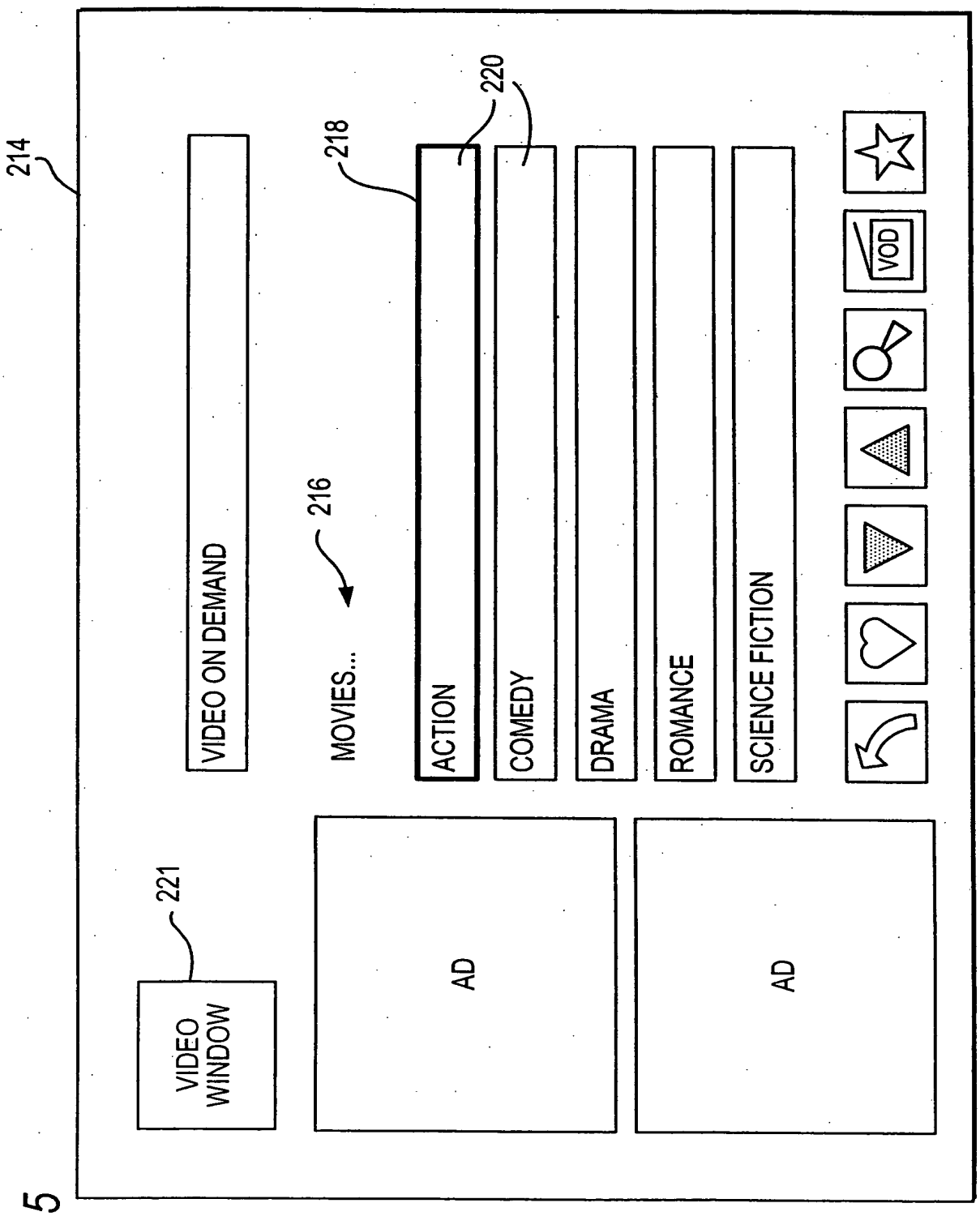

214
VIDEO ON DEMAND
218
220
MOVIES...
216
ACTION
COMEDY
DRAMA
ROMANCE
SCIENCE FICTION
VOD
221
VIDEO WINDOW
AD
AD

FIG. 15

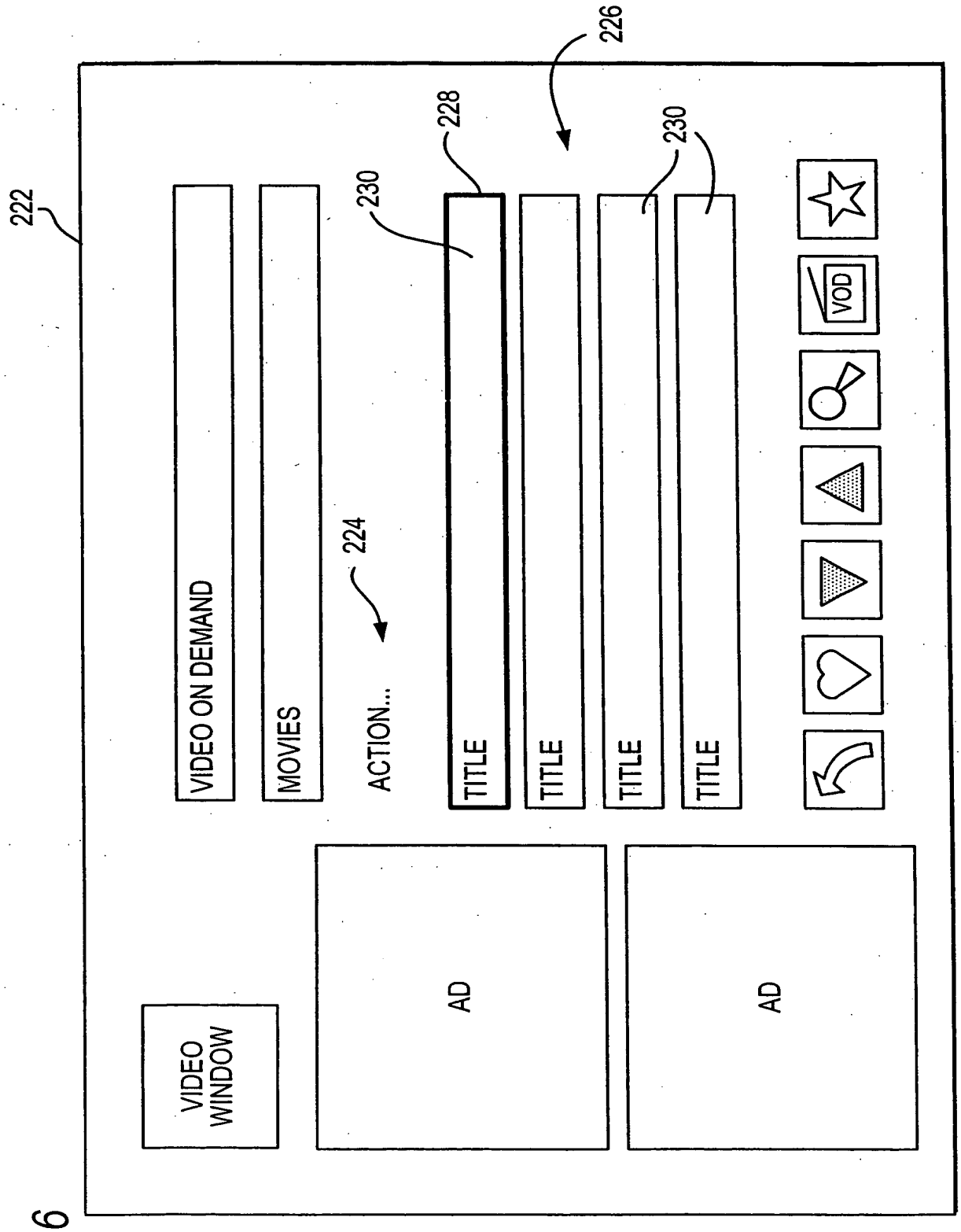

222
226
228
230
230
224
VIDEO ON DEMAND
MOVIES
ACTION...
TITLE
TITLE
TITLE
TITLE
VOD
VIDEO WINDOW
AD
AD

FIG. 16

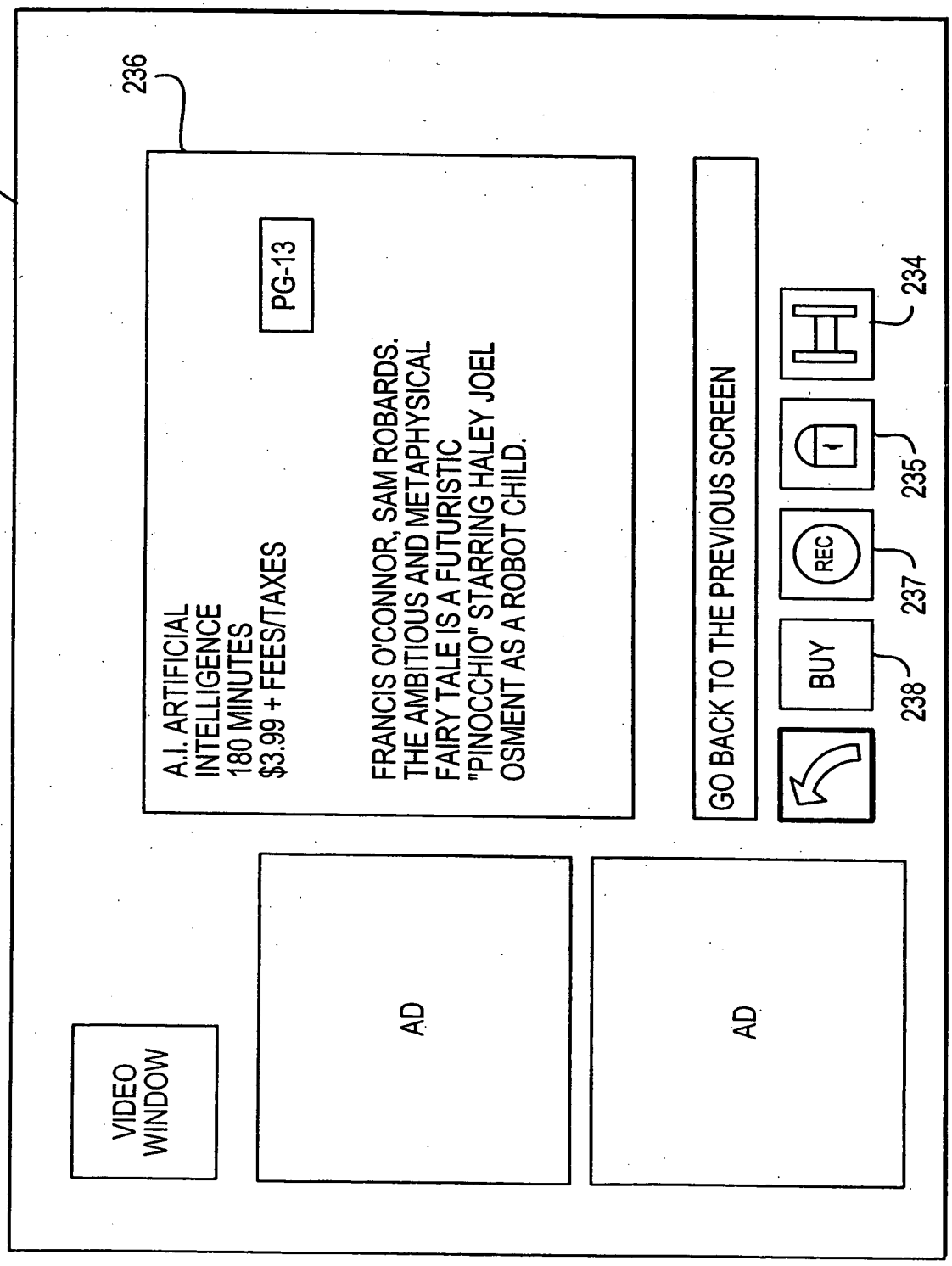

232
236
A.I. ARTIFICIAL
INTELLIGENCE
180 MINUTES
$3.99 + FEES/TAXES
PG-13
FRANCIS O'CONNOR, SAM ROBARDS.
THE AMBITIOUS AND METAPHYSICAL
FAIRY TALE IS A FUTURISTIC
"PINOCCHIO" STARRING HALEY JOEL
OSMENT AS A ROBOT CHILD.
GO BACK TO THE PREVIOUS SCREEN
234
235
REC
237
BUY
238
VIDEO WINDOW
AD
AD

FIG. 17a

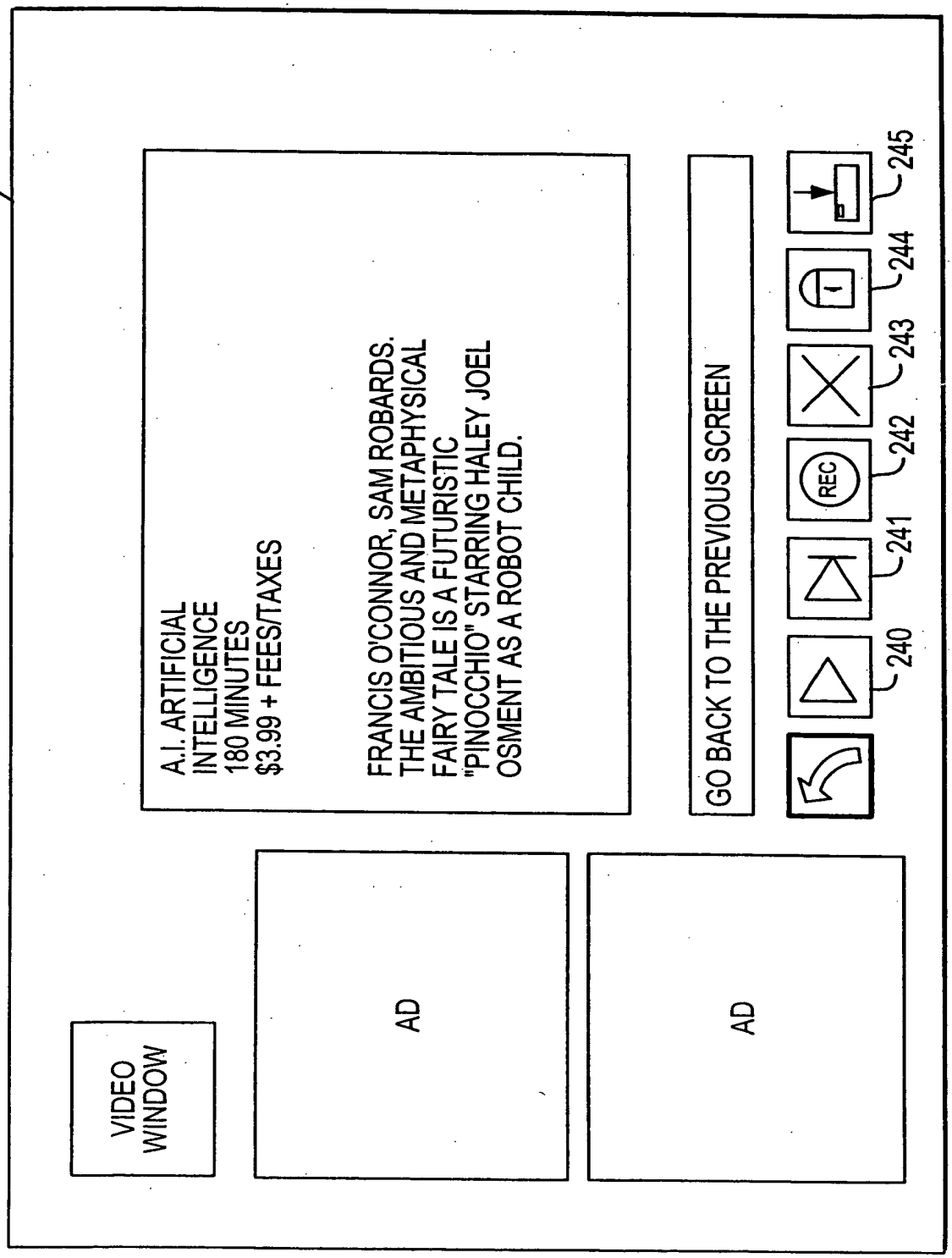

239
A.I. ARTIFICIAL
INTELLIGENCE
180 MINUTES
$3.99 + FEES/TAXES
FRANCIS O'CONNOR, SAM ROBARDS.
THE AMBITIOUS AND METAPHYSICAL
FAIRY TALE IS A FUTURISTIC
"PINOCCHIO" STARRING HALEY JOEL
OSMENT AS A ROBOT CHILD.
GO BACK TO THE PREVIOUS SCREEN
REC
240
241
242
243
244
245
VIDEO WINDOW
AD
AD

FIG. 17b

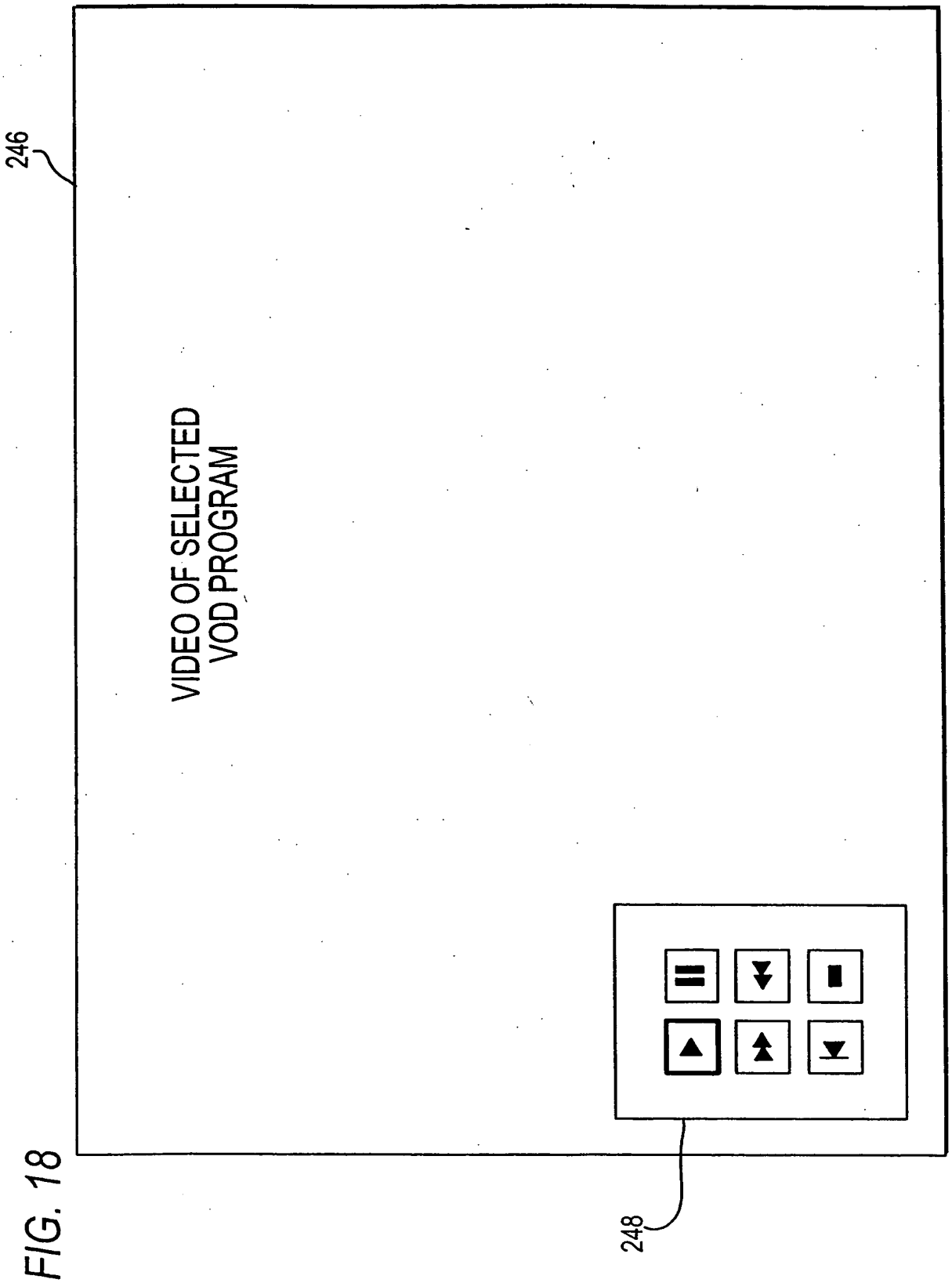


FIG. 18

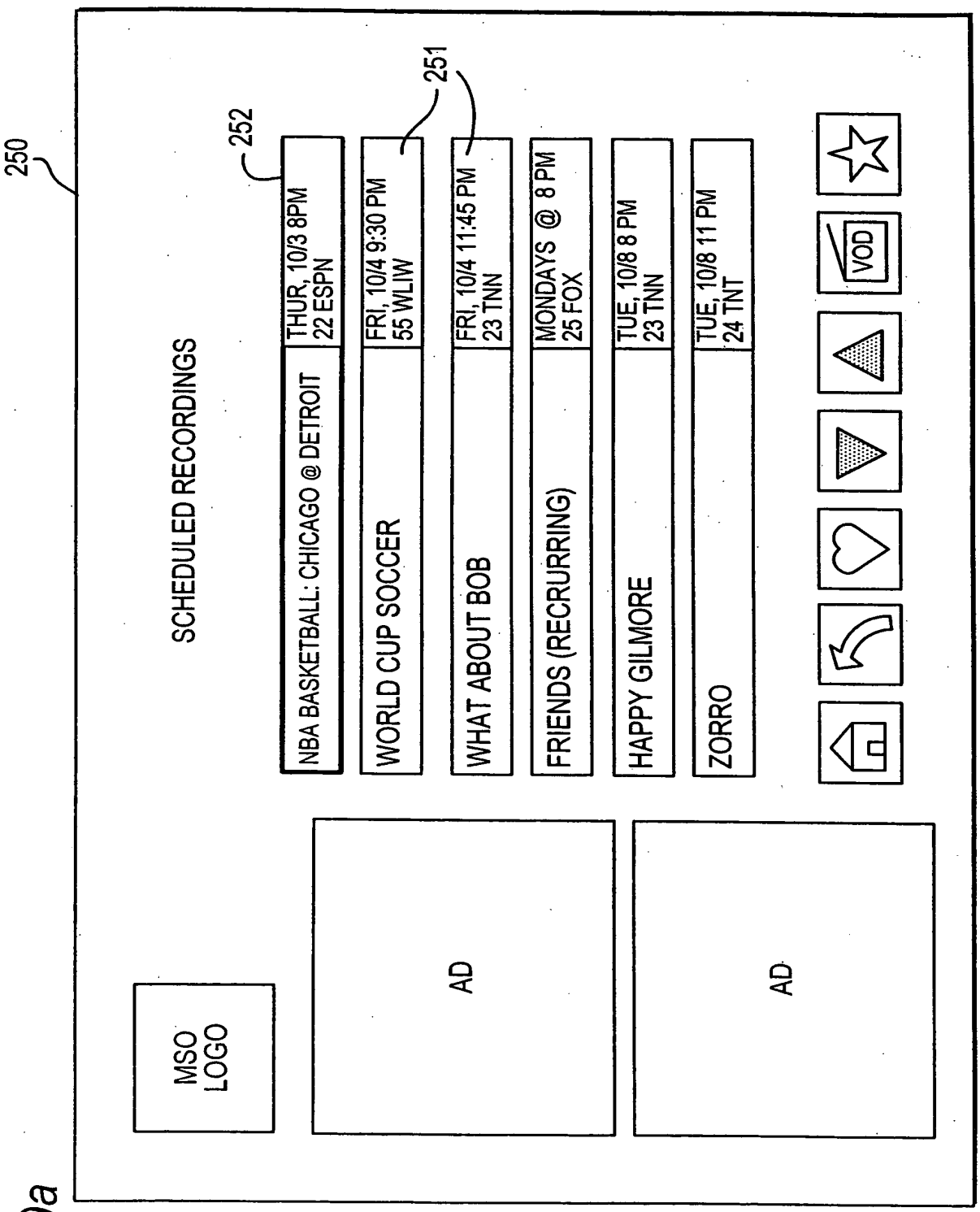

250
SCHEDULED RECORDINGS
252
251
NBA BASKETBALL: CHICAGO @ DETROIT
THUR, 10/3 8PM
22 ESPN
WORLD CUP SOCCER
FRI, 10/4 9:30 PM
55 WLIW
WHAT ABOUT BOB
FRI, 10/4 11:45 PM
23 TNN
FRIENDS (RECRURRING)
MONDAYS @ 8 PM
25 FOX
HAPPY GILMORE
TUE, 10/8 8 PM
23 TNN
ZORRO
TUE, 10/8 11 PM
24 TNT
VOD
MSO LOGO
AD
AD

FIG. 19a

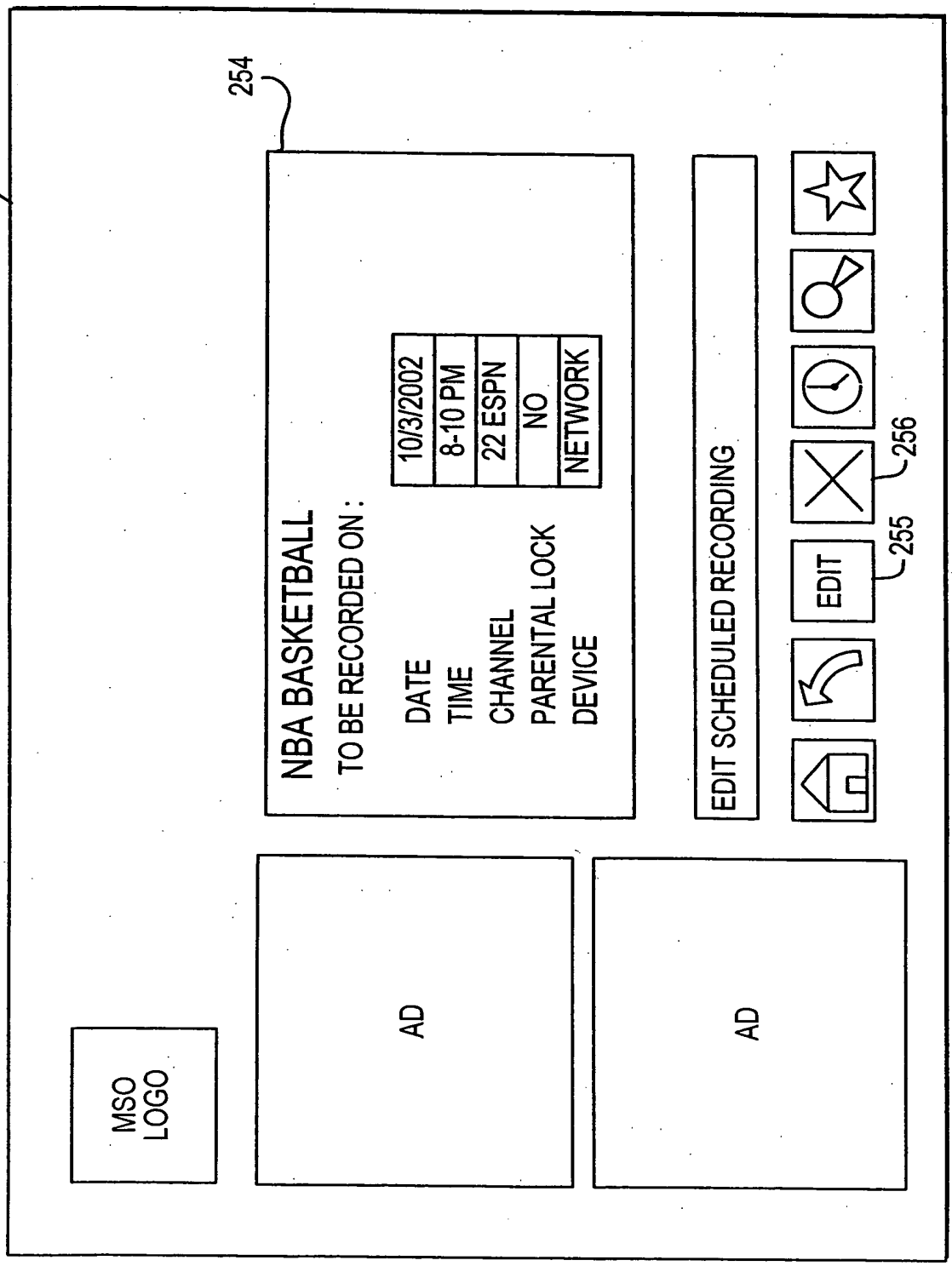

253
254
NBA BASKETBALL
TO BE RECORDED ON :
DATE
TIME
CHANNEL
PARENTAL LOCK
DEVICE
10/3/2002
8-10 PM
22 ESPN
NO
NETWORK
EDIT SCHEDULED RECORDING
EDIT
255
256
MSO LOGO
AD
AD

FIG. 19b

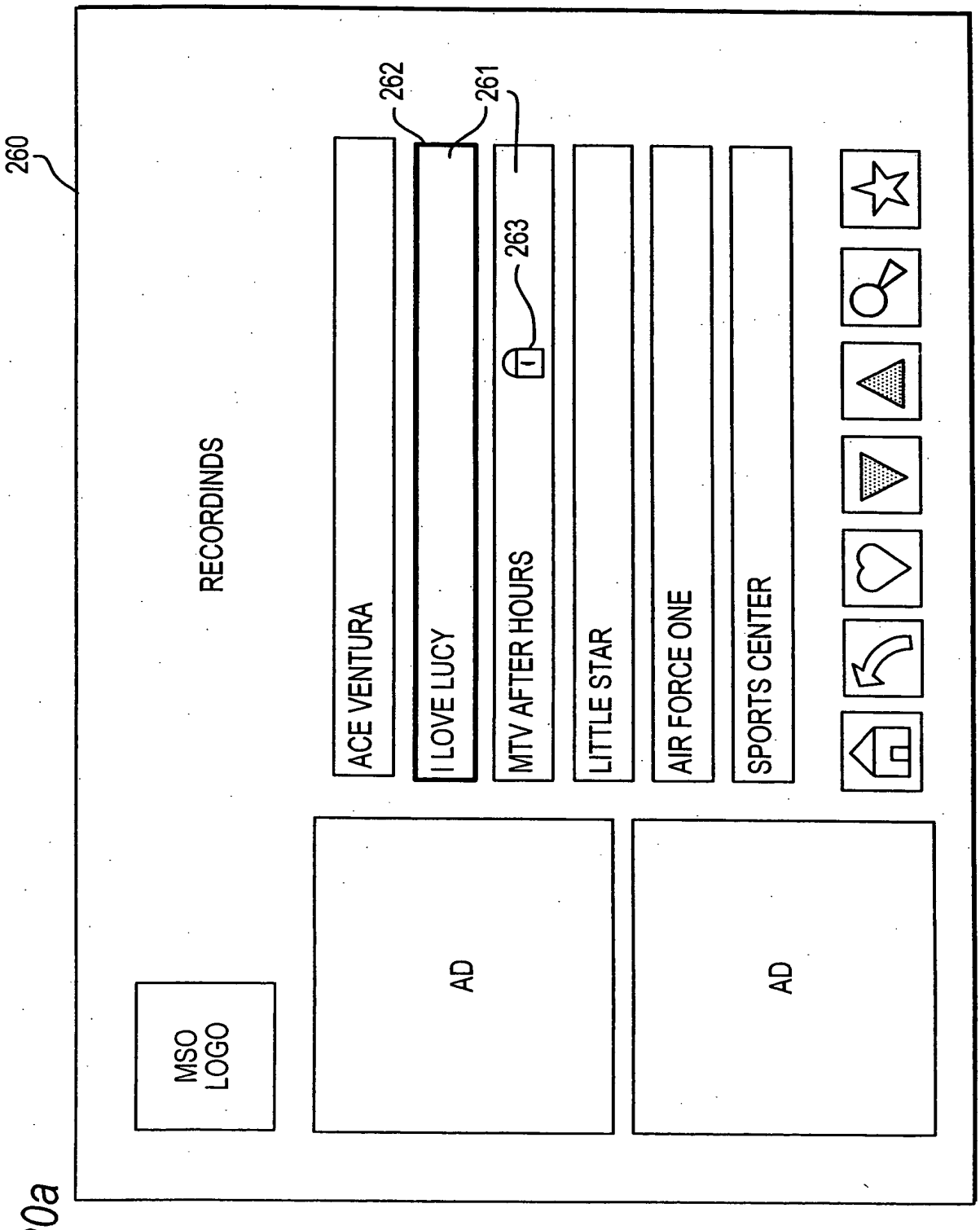

260
RECORDINDS
262
261
263
ACE VENTURA
I LOVE LUCY
MTV AFTER HOURS
LITTLE STAR
AIR FORCE ONE
SPORTS CENTER
MSO LOGO
AD
AD

FIG. 20a

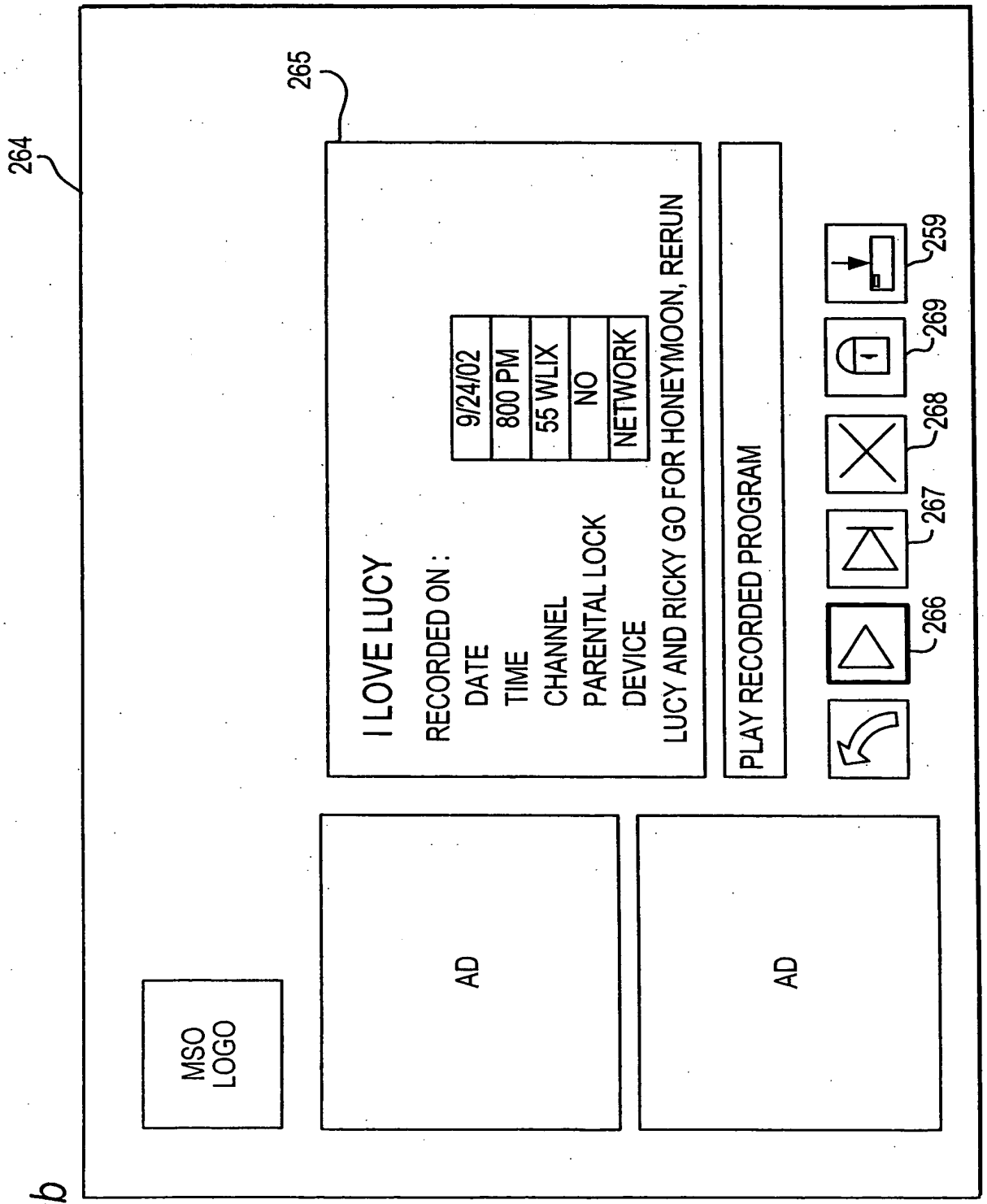

264
265
I LOVE LUCY
RECORDED ON :
DATE
TIME
CHANNEL
PARENTAL LOCK
DEVICE
LUCY AND RICKY GO FOR HONEYMOON, RERUN
9/24/02
800 PM
55 WLIX
NO
NETWORK
PLAY RECORDED PROGRAM
MSO LOGO
AD
AD
266
267
268
269
259

FIG. 20b

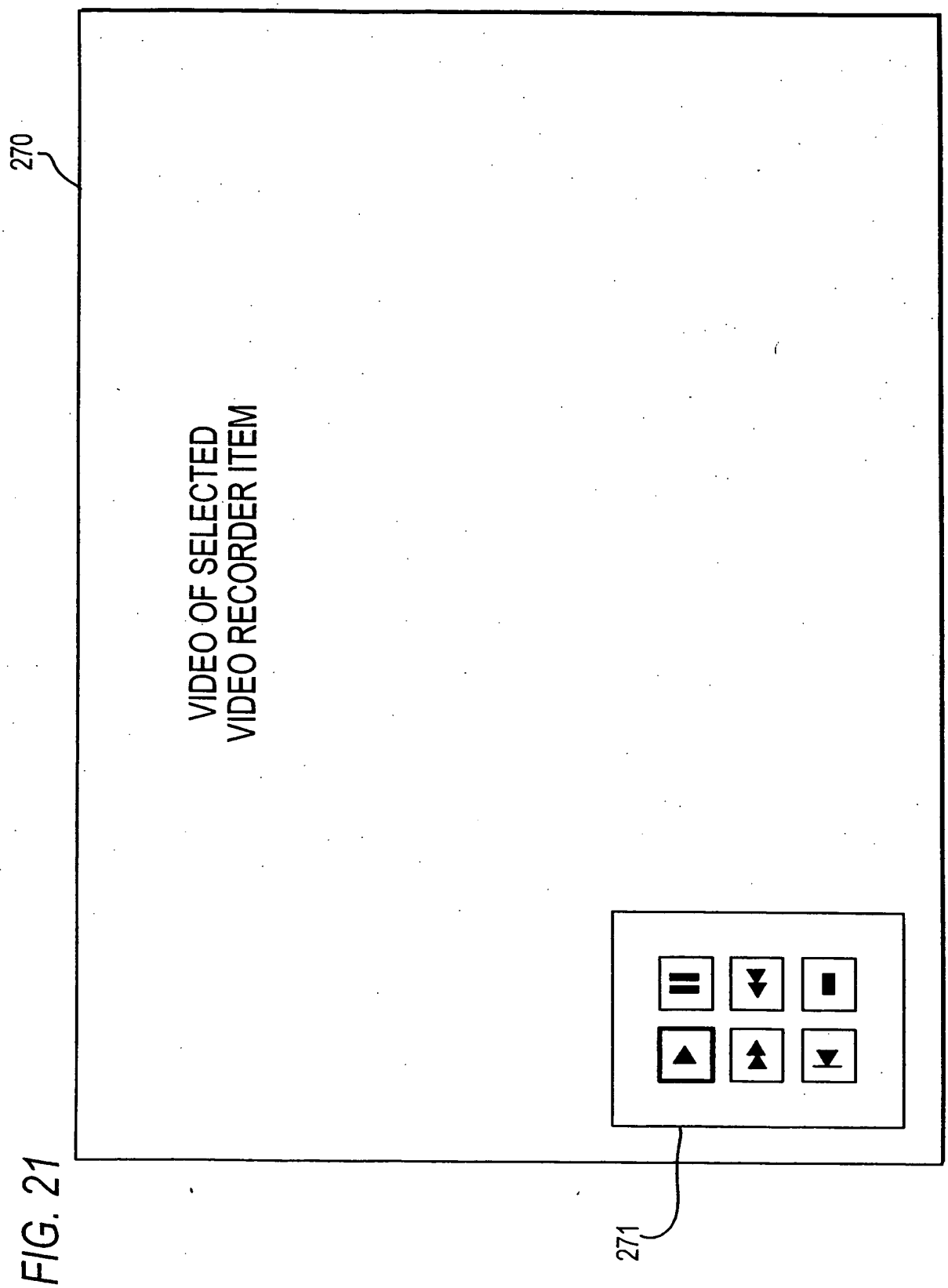


FIG. 21

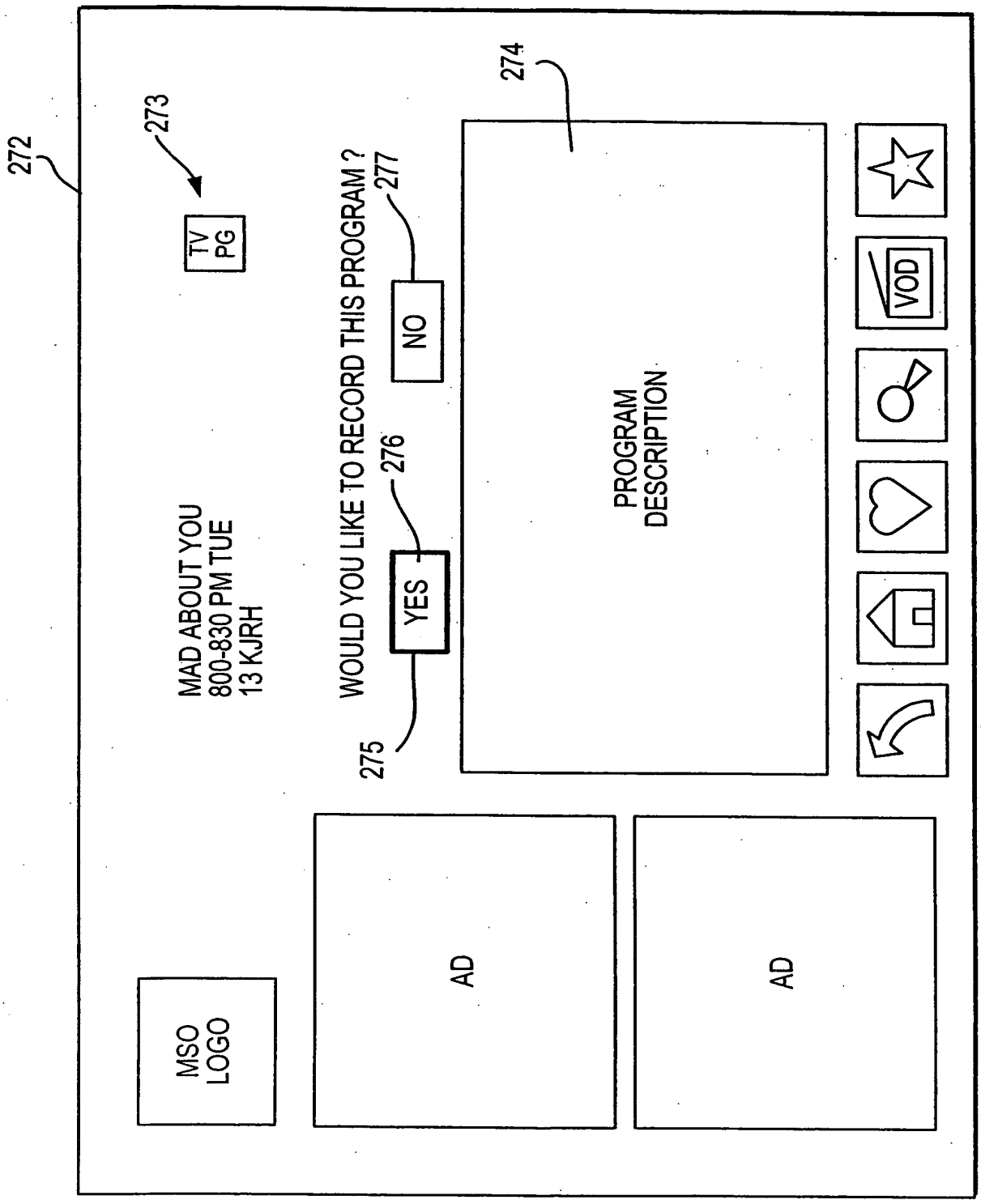

272
273
TV PG
MAD ABOUT YOU
800-830 PM TUE
13 KJRH
274
PROGRAM DESCRIPTION
WOULD YOU LIKE TO RECORD THIS PROGRAM ?
277
NO
276
YES
275
VOD
MSO LOGO
AD
AD

FIG. 22

FIG. 23a

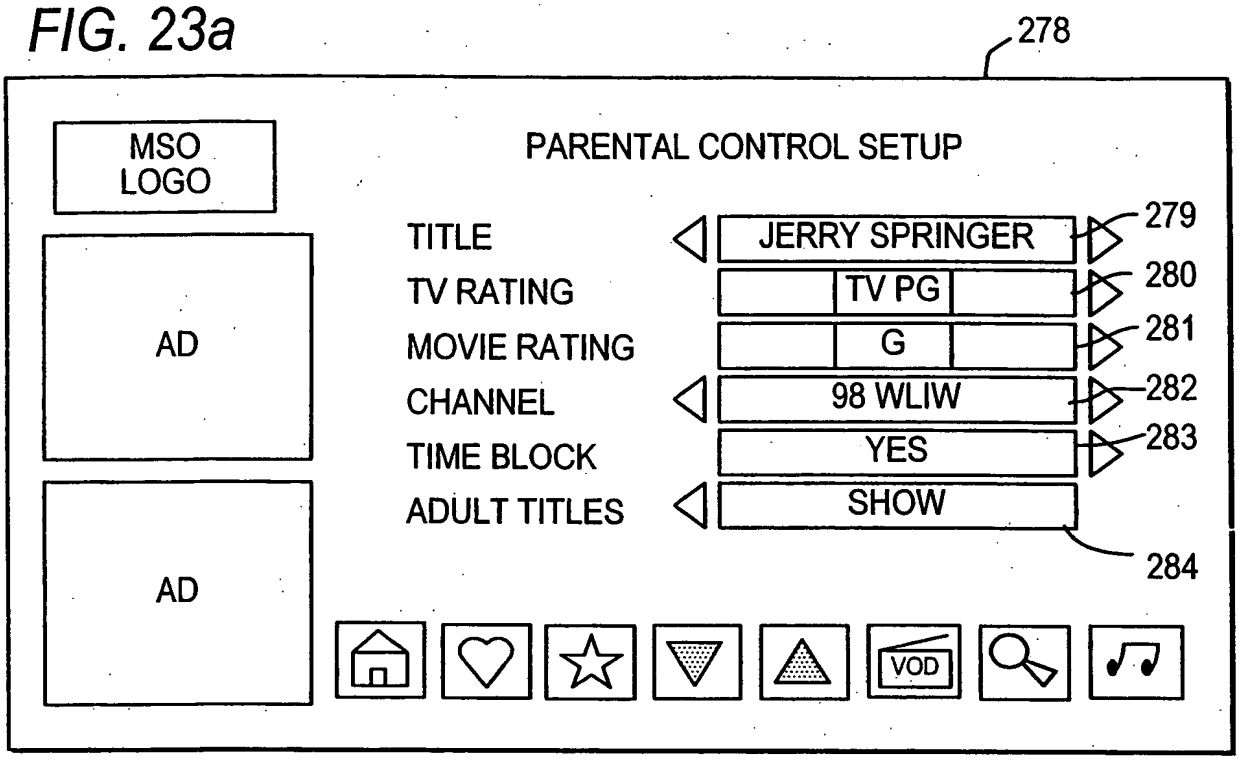
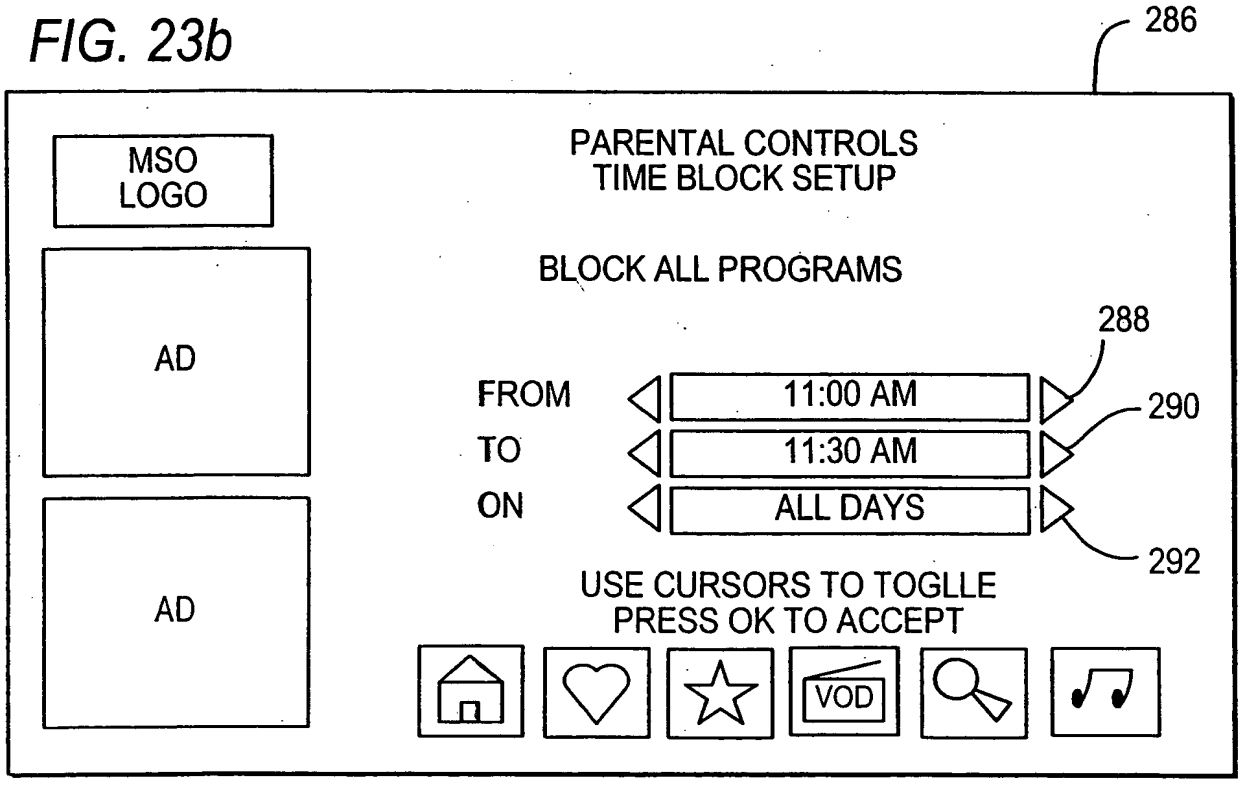


FIG. 23b



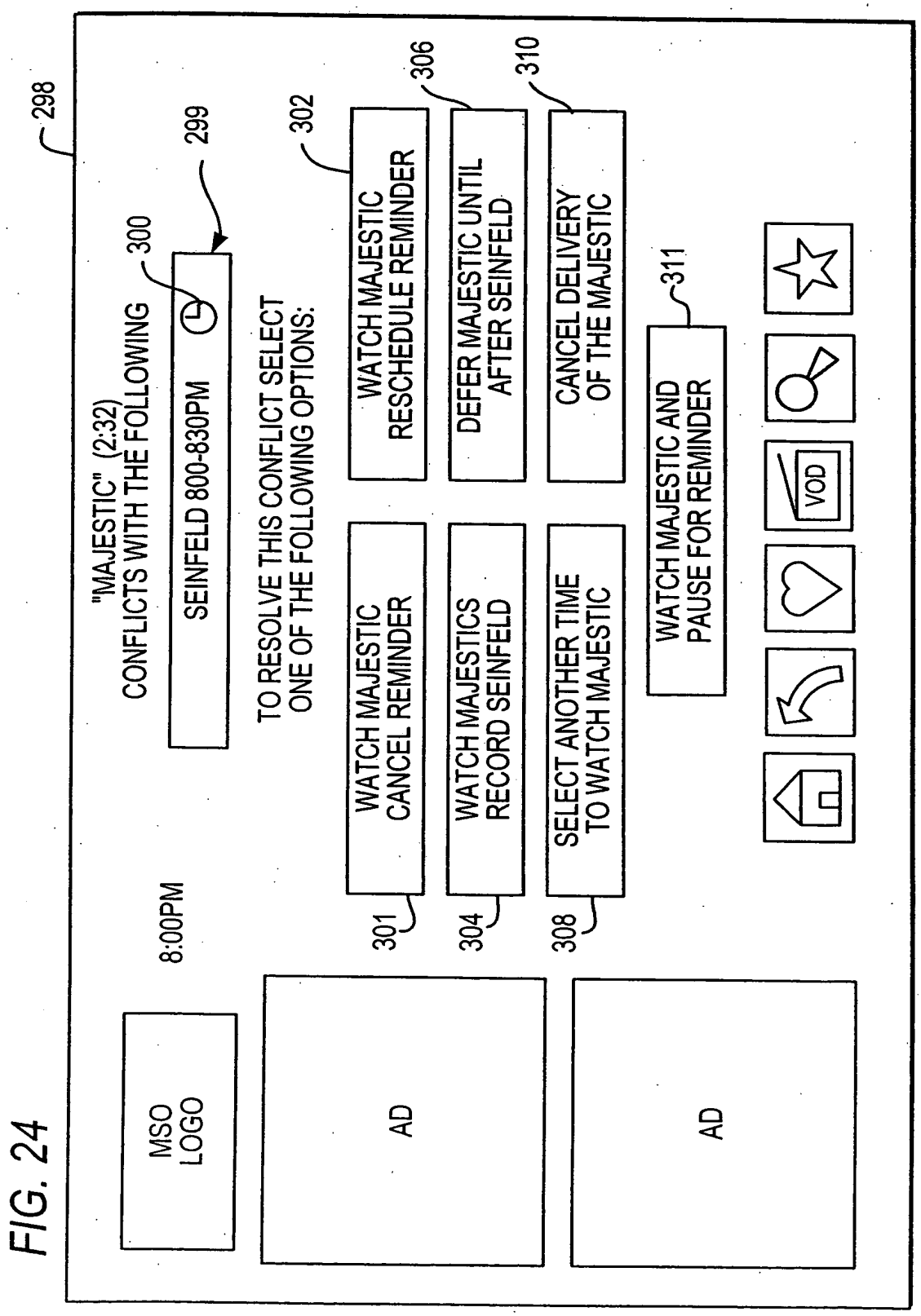

298
"MAJESTIC" (2:32)
CONFLICTS WITH THE FOLLOWING
300
SEINFELD 800-830PM
299
TO RESOLVE THIS CONFLICT SELECT
ONE OF THE FOLLOWING OPTIONS:
302
WATCH MAJESTIC
RESCHEDULE REMINDER
306
DEFER MAJESTIC UNTIL
AFTER SEINFELD
310
CANCEL DELIVERY
OF THE MAJESTIC
311
WATCH MAJESTIC AND
PAUSE FOR REMINDER
WATCH MAJESTIC
CANCEL REMINDER
301
WATCH MAJESTICS
RECORD SEINFELD
304
SELECT ANOTHER TIME
TO WATCH MAJESTIC
308
8:00PM
MSO
LOGO
AD
AD
VOD

FIG. 24

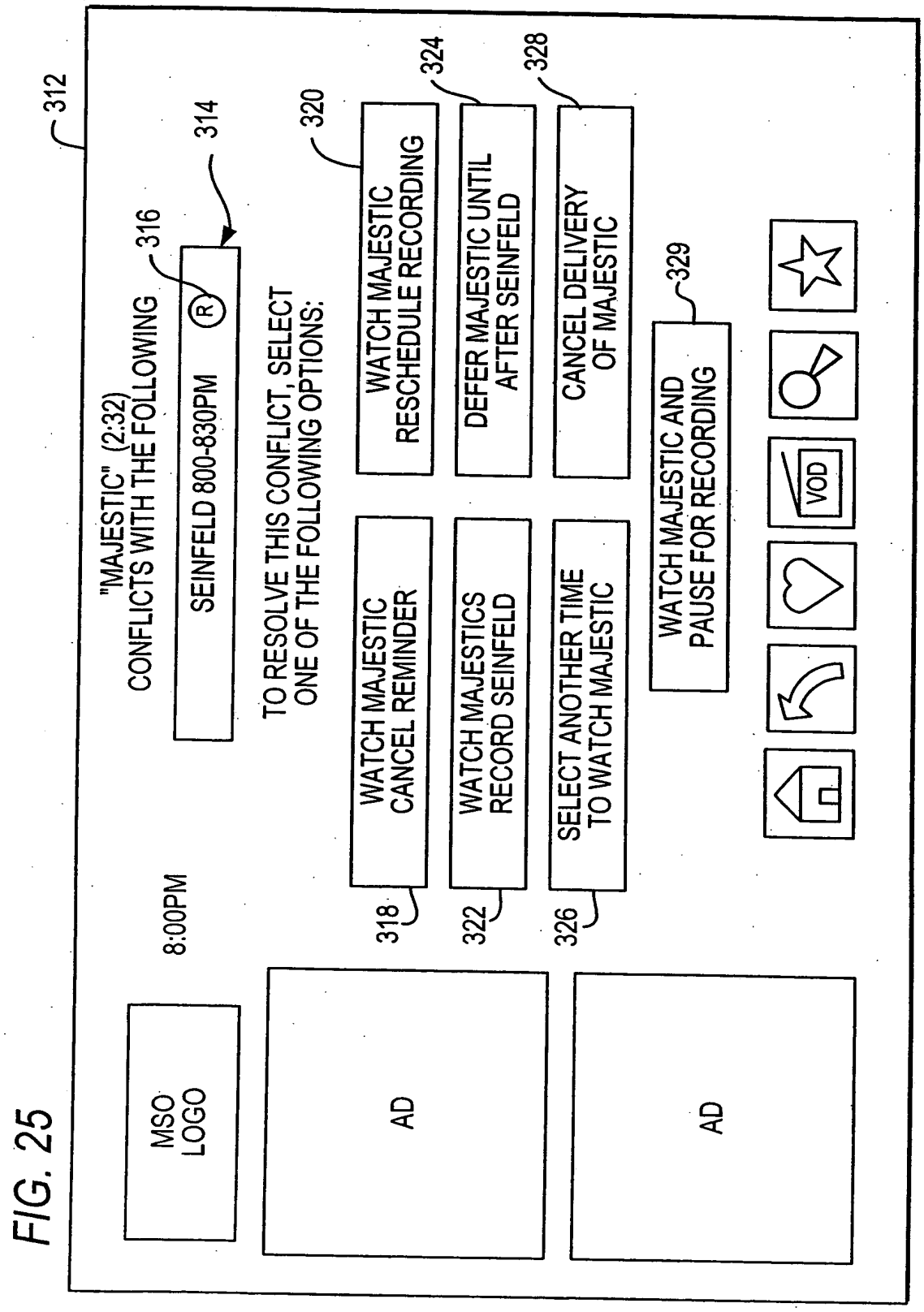

312
"MAJESTIC" (2:32)
CONFLICTS WITH THE FOLLOWING
316
SEINFELD 800-830PM
314
TO RESOLVE THIS CONFLICT, SELECT
ONE OF THE FOLLOWING OPTIONS:
320
WATCH MAJESTIC
RESCHEDULE RECORDING
324
DEFER MAJESTIC UNTIL
AFTER SEINFELD
328
CANCEL DELIVERY
OF MAJESTIC
329
WATCH MAJESTIC AND
PAUSE FOR RECORDING
8:00PM
WATCH MAJESTIC
CANCEL REMINDER
318
WATCH MAJESTICS
RECORD SEINFELD
322
SELECT ANOTHER TIME
TO WATCH MAJESTIC
326
MSO
LOGO
AD
AD
VOD

FIG. 25

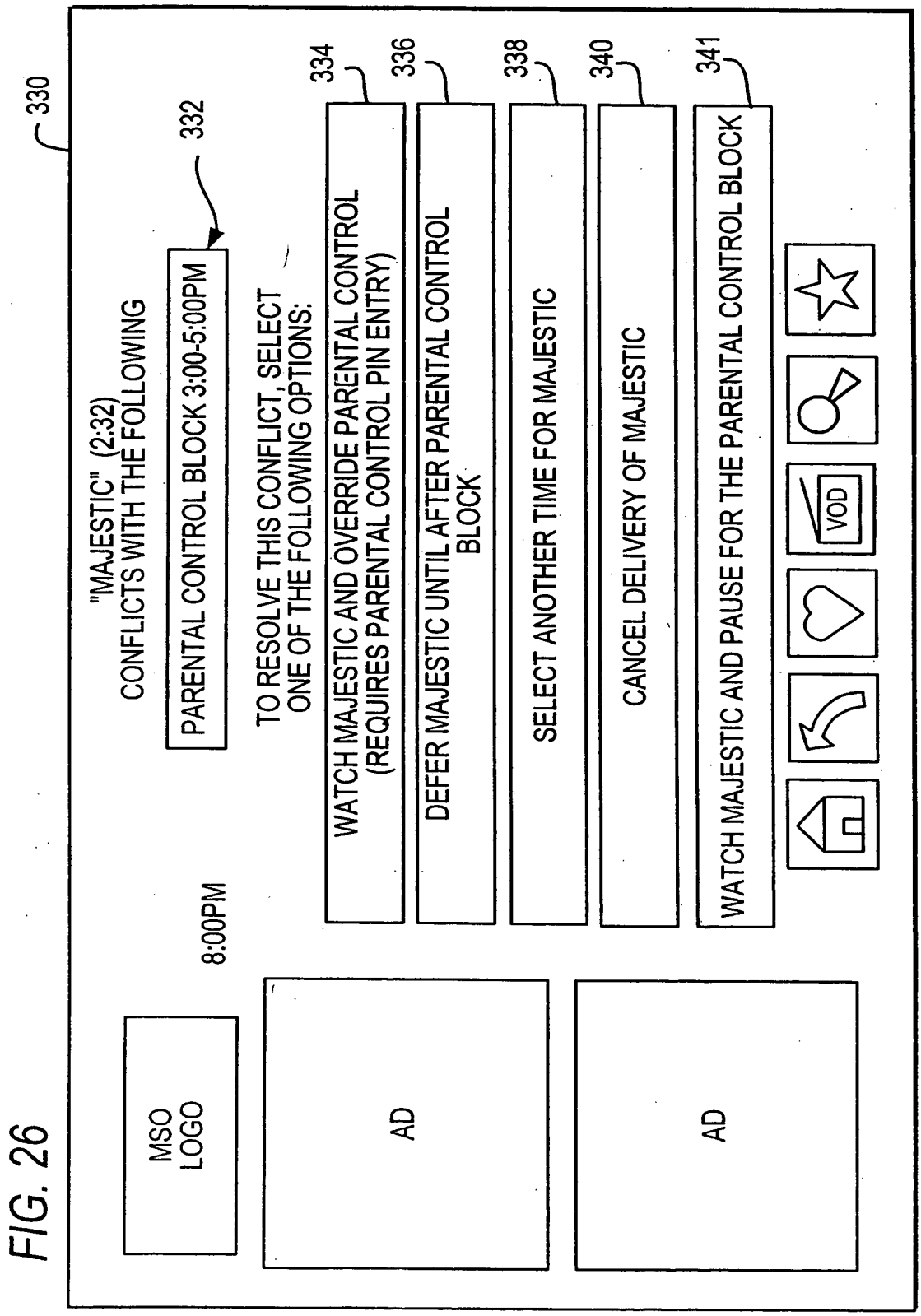

330
"MAJESTIC" (2:32)
CONFLICTS WITH THE FOLLOWING
332
PARENTAL CONTROL BLOCK 3:00-5:00PM
TO RESOLVE THIS CONFLICT, SELECT
ONE OF THE FOLLOWING OPTIONS:
334
WATCH MAJESTIC AND OVERRIDE PARENTAL CONTROL
(REQUIRES PARENTAL CONTROL PIN ENTRY)
336
DEFER MAJESTIC UNTIL AFTER PARENTAL CONTROL
BLOCK
338
SELECT ANOTHER TIME FOR MAJESTIC
340
CANCEL DELIVERY OF MAJESTIC
341
WATCH MAJESTIC AND PAUSE FOR THE PARENTAL CONTROL BLOCK
VOD
8:00PM
MSO
LOGO
AD
AD

FIG. 26

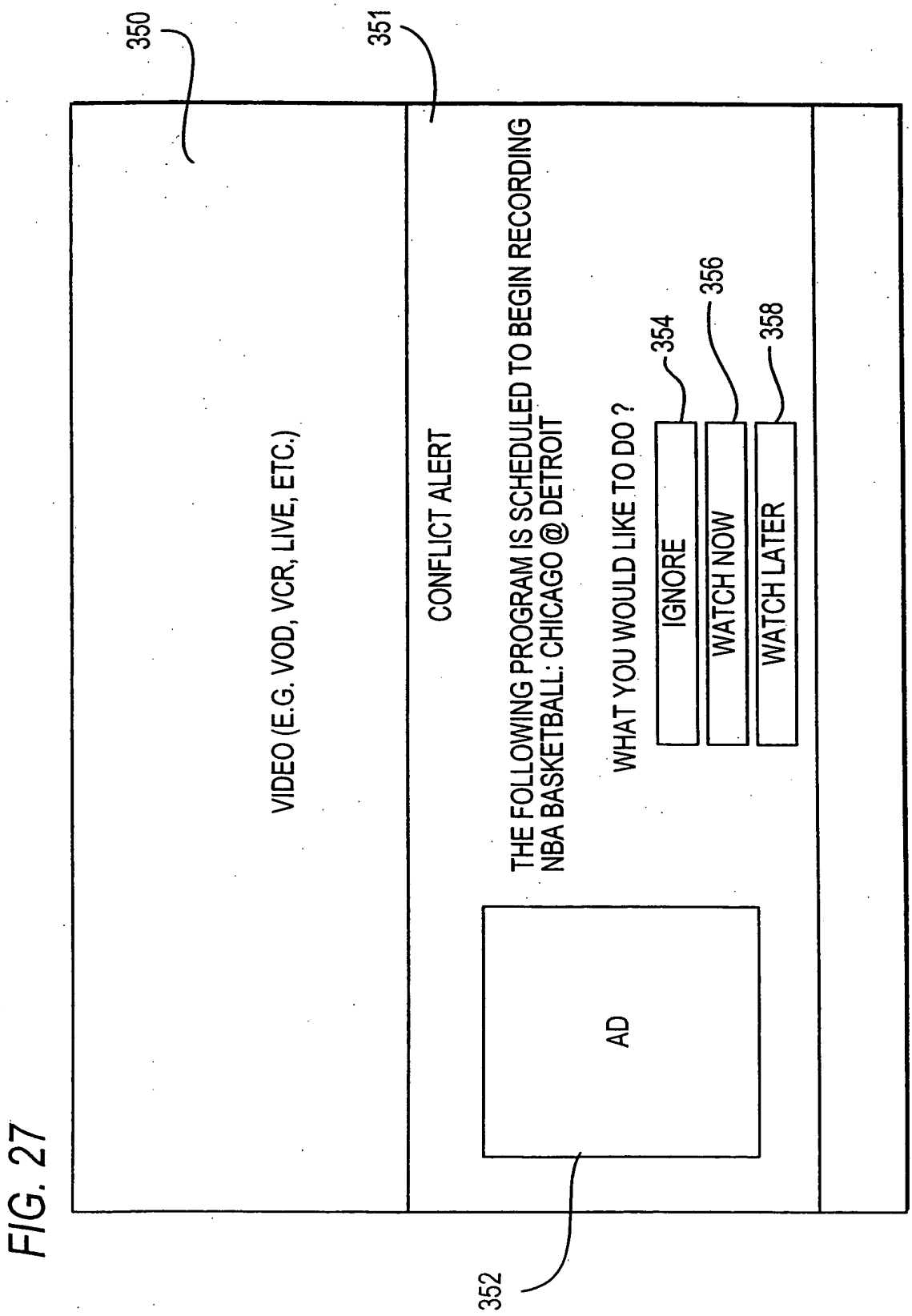

350
351
VIDEO (E.G. VOD, VCR, LIVE, ETC.)
CONFLICT ALERT
THE FOLLOWING PROGRAM IS SCHEDULED TO BEGIN RECORDING
NBA BASKETBALL: CHICAGO @ DETROIT
WHAT YOU WOULD LIKE TO DO ?
354
356
358
IGNORE
WATCH NOW
WATCH LATER
AD
352

FIG. 27

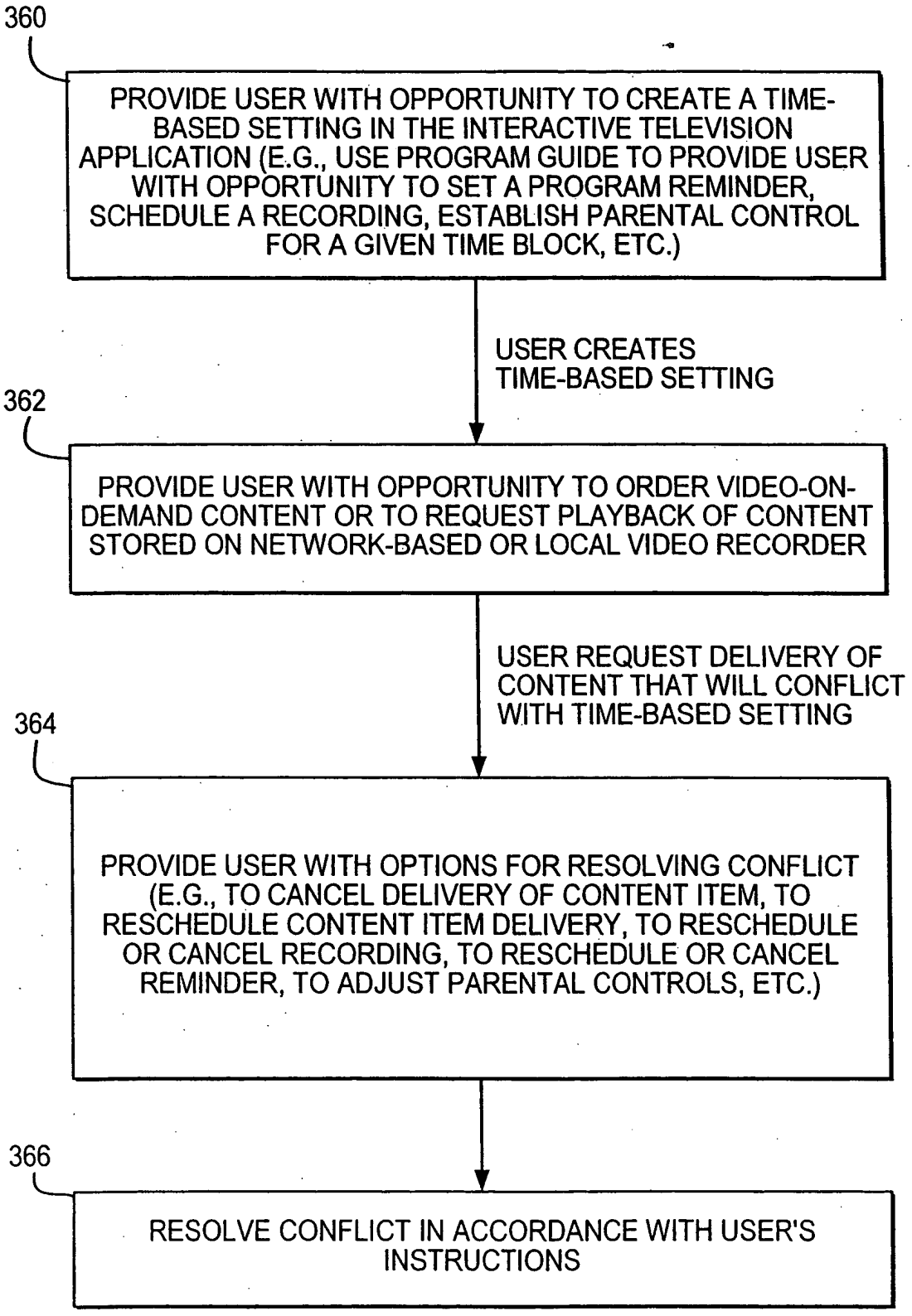

360
PROVIDE USER WITH OPPORTUNITY TO CREATE A TIME-BASED SETTING IN THE INTERACTIVE TELEVISION APPLICATION (E.G., USE PROGRAM GUIDE TO PROVIDE USER WITH OPPORTUNITY TO SET A PROGRAM REMINDER, SCHEDULE A RECORDING, ESTABLISH PARENTAL CONTROL FOR A GIVEN TIME BLOCK, ETC.)
USER CREATES TIME-BASED SETTING
362
PROVIDE USER WITH OPPORTUNITY TO ORDER VIDEO-ON-DEMAND CONTENT OR TO REQUEST PLAYBACK OF CONTENT STORED ON NETWORK-BASED OR LOCAL VIDEO RECORDER
USER REQUEST DELIVERY OF CONTENT THAT WILL CONFLICT WITH TIME-BASED SETTING
364
PROVIDE USER WITH OPTIONS FOR RESOLVING CONFLICT (E.G., TO CANCEL DELIVERY OF CONTENT ITEM, TO RESCHEDULE CONTENT ITEM DELIVERY, TO RESCHEDULE OR CANCEL RECORDING, TO RESCHEDULE OR CANCEL REMINDER, TO ADJUST PARENTAL CONTROLS, ETC.)
366
RESOLVE CONFLICT IN ACCORDANCE WITH USER'S INSTRUCTIONS

FIG. 28

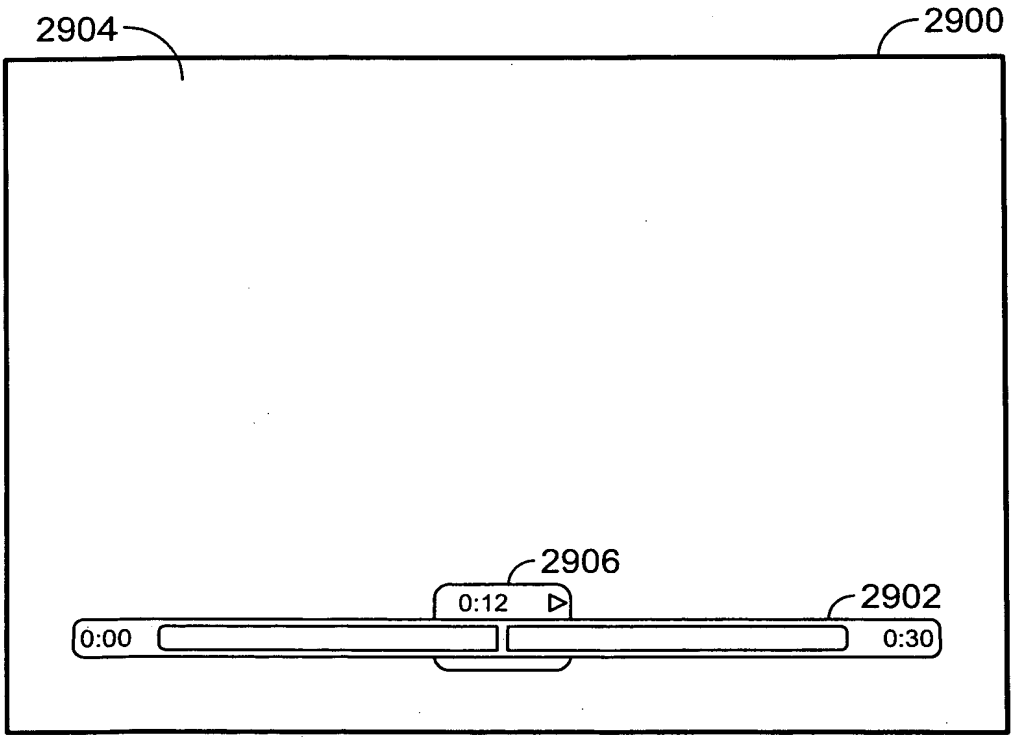

2904
2900
2906
0:12
2902
0:00
0:30

FIG. 29

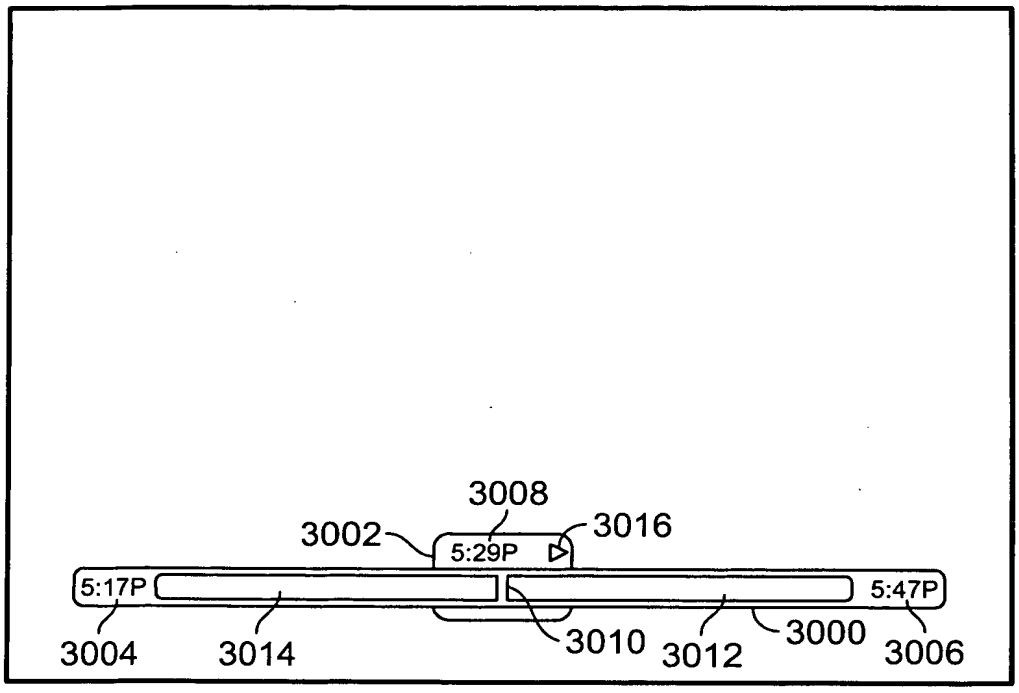

3008
3002
3016
5:29P
5:17P
5:47P
3004
3014
3010
3012
3000
3006

FIG. 30

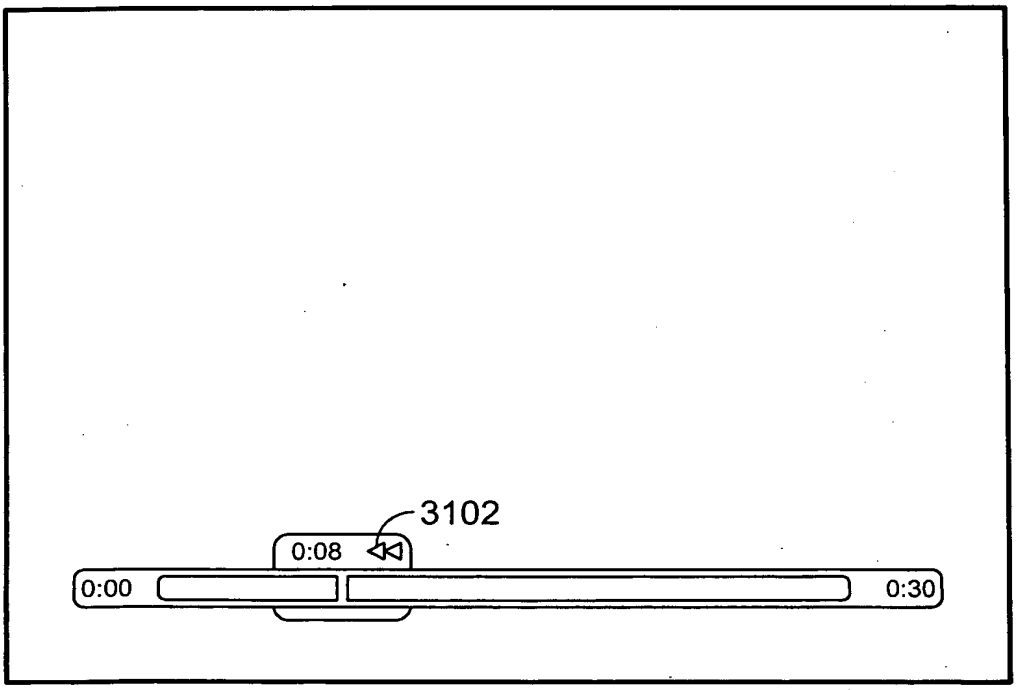

3102
0:08
0:00
0:30

FIG. 31

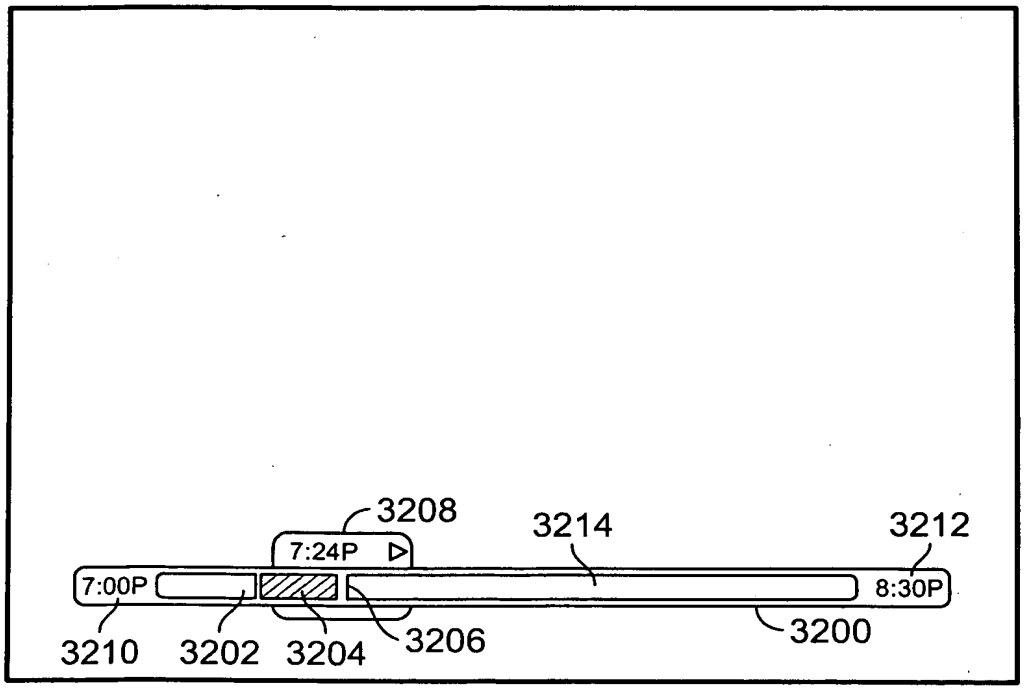

3208
7:24P
3214
3212
7:00P
8:30P
3210
3202
3204
3206
3200

FIG. 32

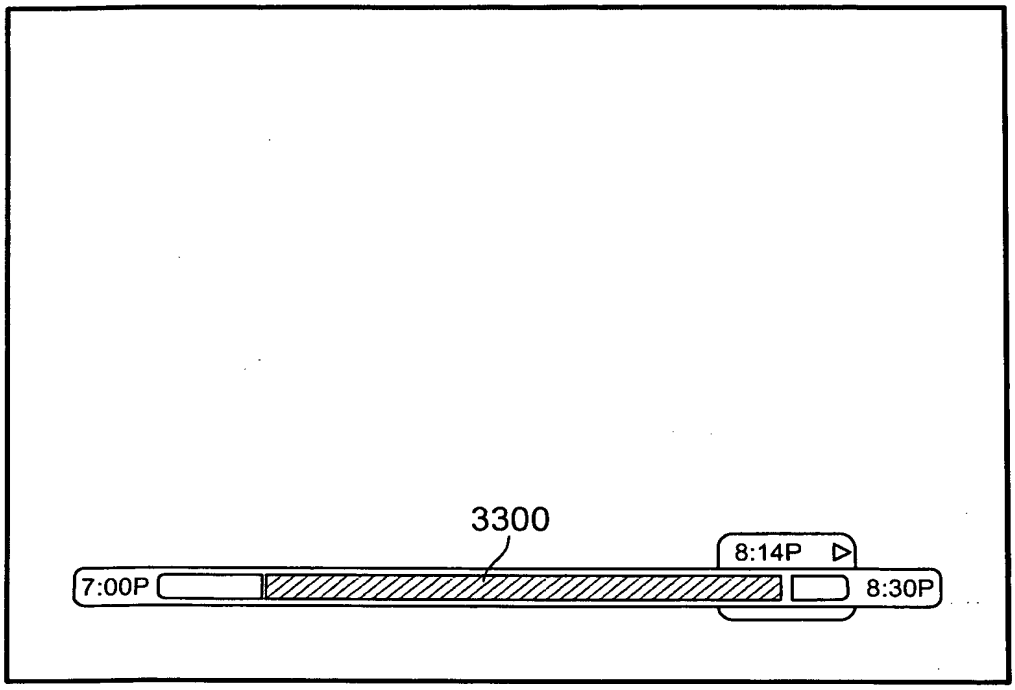


FIG. 33

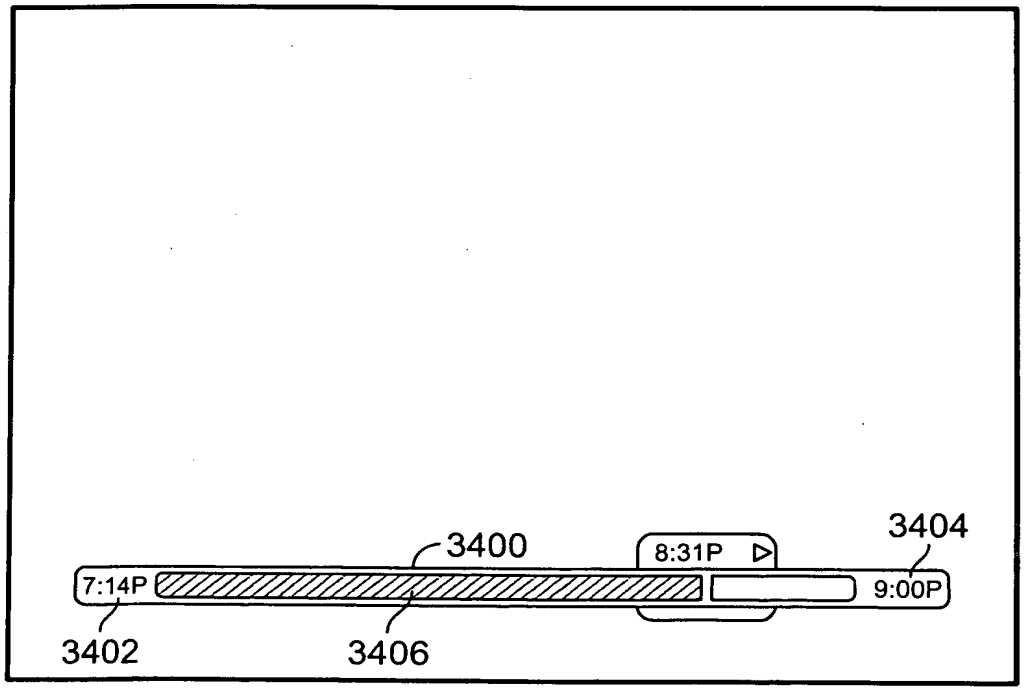


FIG. 34

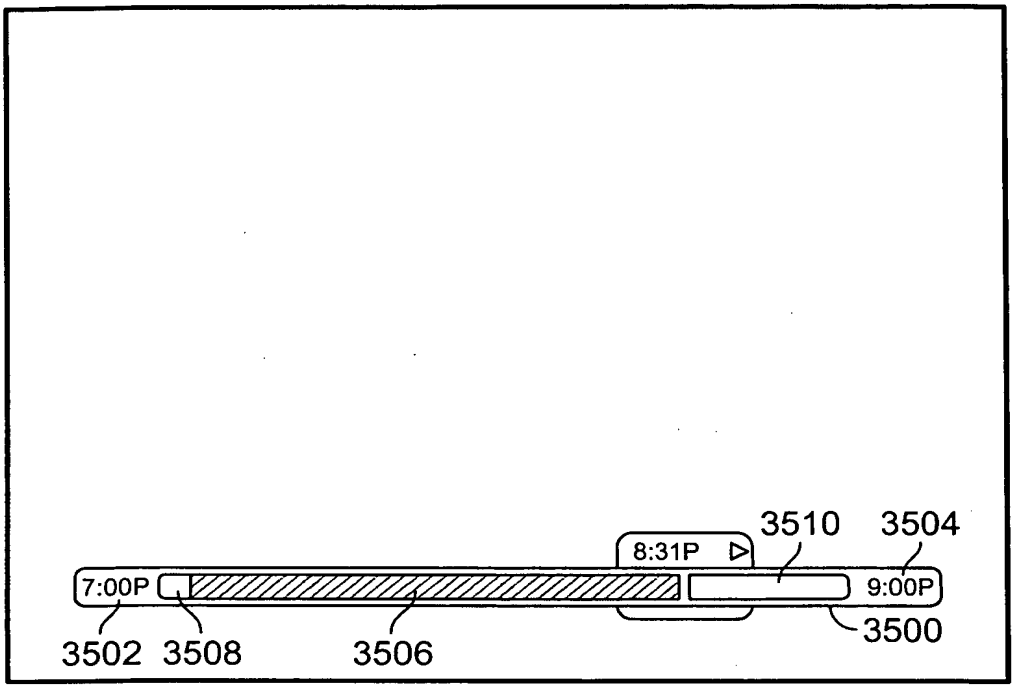

3510
3504
8:31P
7:00P
9:00P
3502
3508
3506
3500

FIG. 35

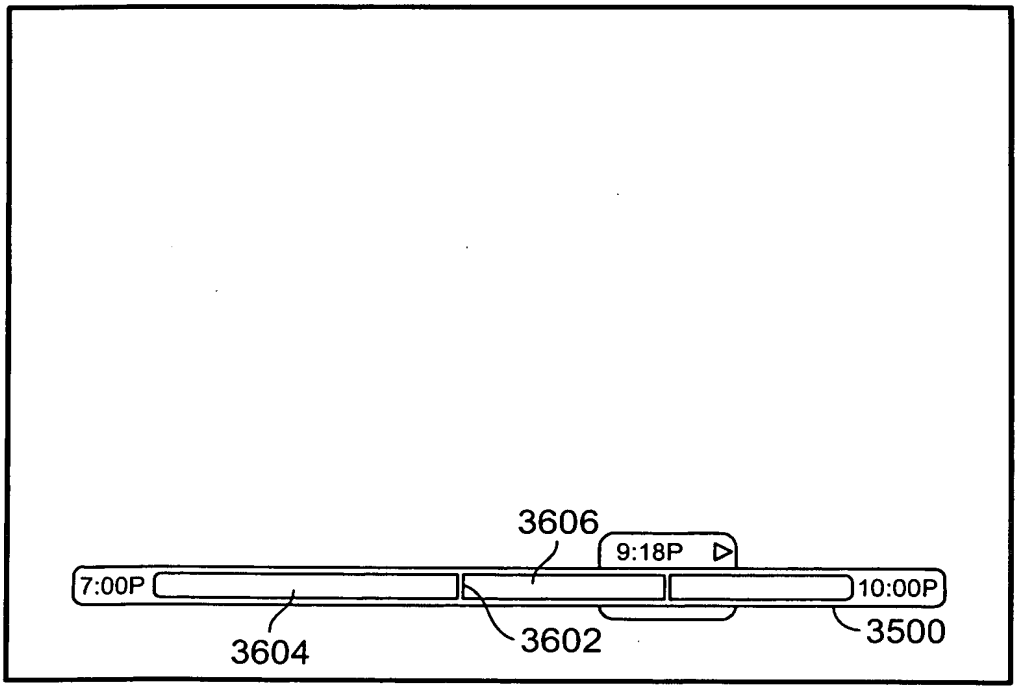

3606
9:18P
7:00P
10:00P
3604
3602
3500

FIG. 36

TRANSPORT CONTROL FOR LIVE VIDEO - START RECORDING EXAMPLE #1

STATE: WATCHING LIVE VIDEO

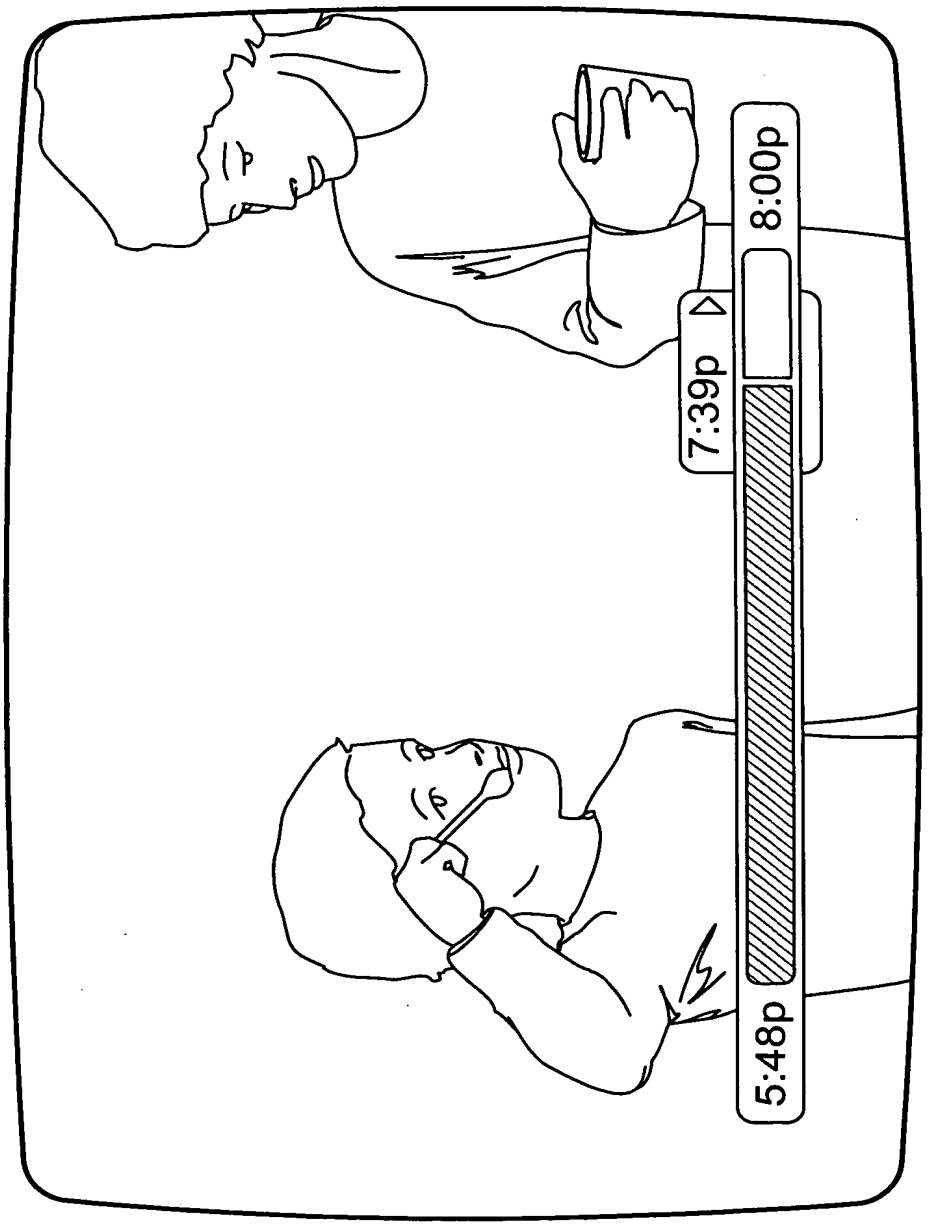


FIG. 37

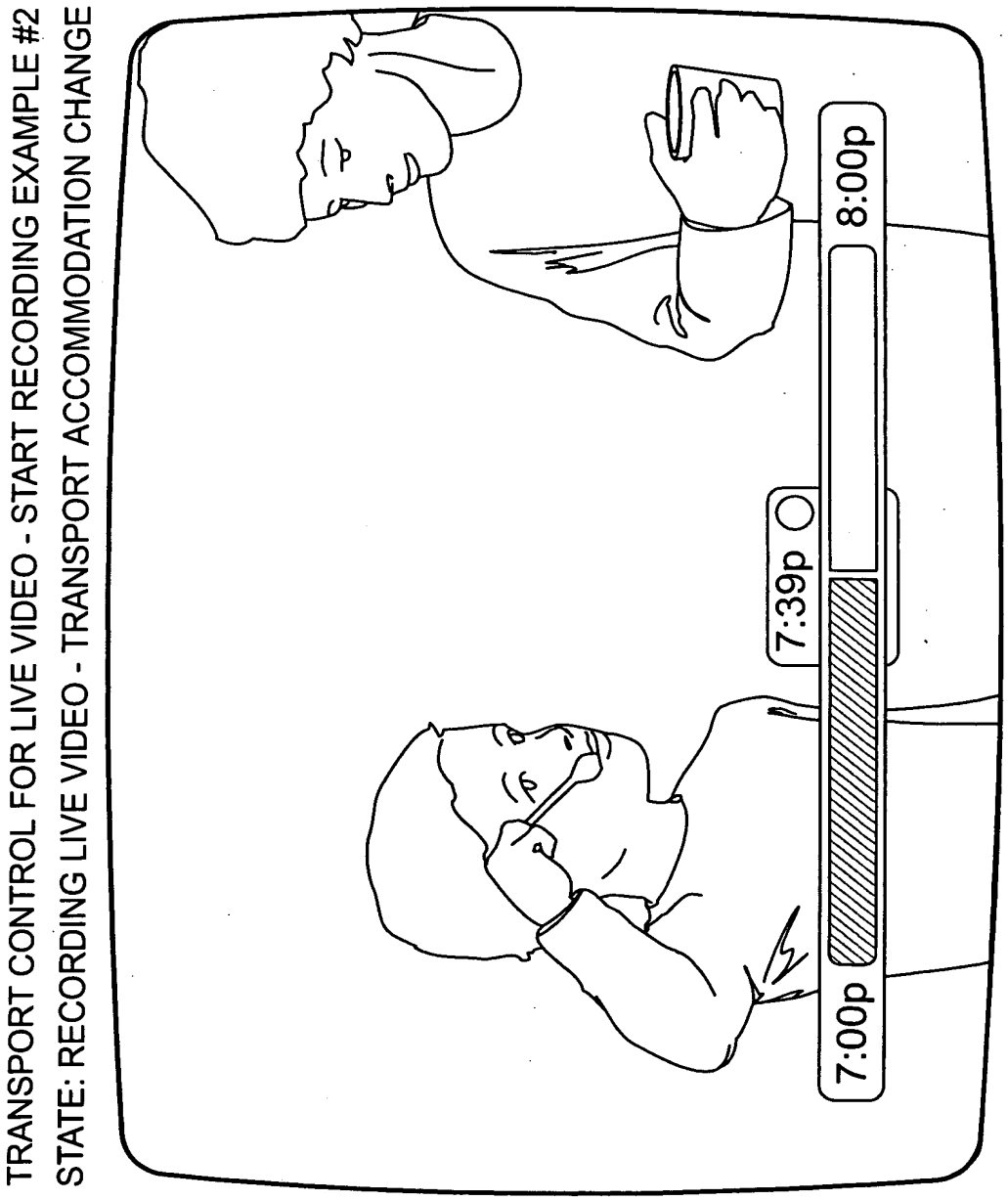

TRANSPORT CONTROL FOR LIVE VIDEO - START RECORDING EXAMPLE #2
STATE: RECORDING LIVE VIDEO - TRANSPORT ACCOMMODATION CHANGE
8:00p
7:39p
7:00p

FIG. 38

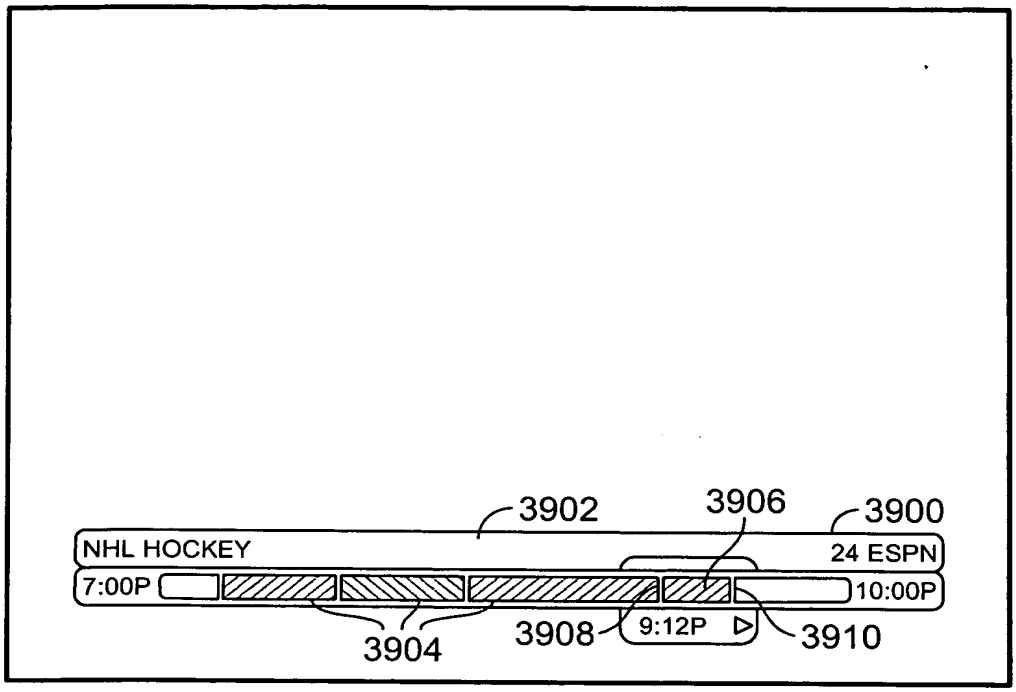

3902
3906
3900
NHL HOCKEY
24 ESPN
7:00P
10:00P
3904
3908
9:12P
3910

FIG. 39

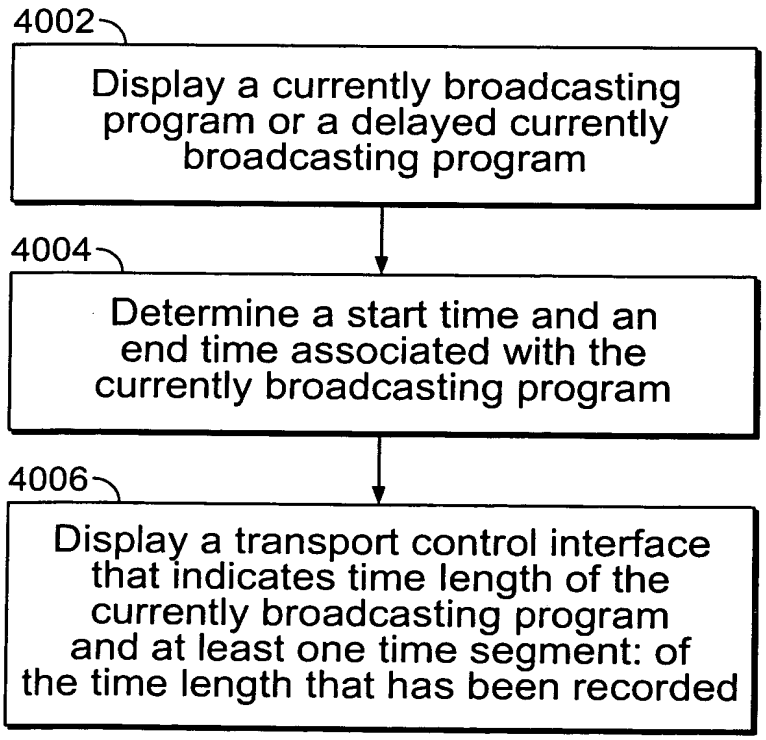

4002
Display a currently broadcasting program or a delayed currently broadcasting program
4004
Determine a start time and an end time associated with the currently broadcasting program
4006
Display a transport control interface that indicates time length of the currently broadcasting program and at least one time segment: of the time length that has been recorded

FIG. 40

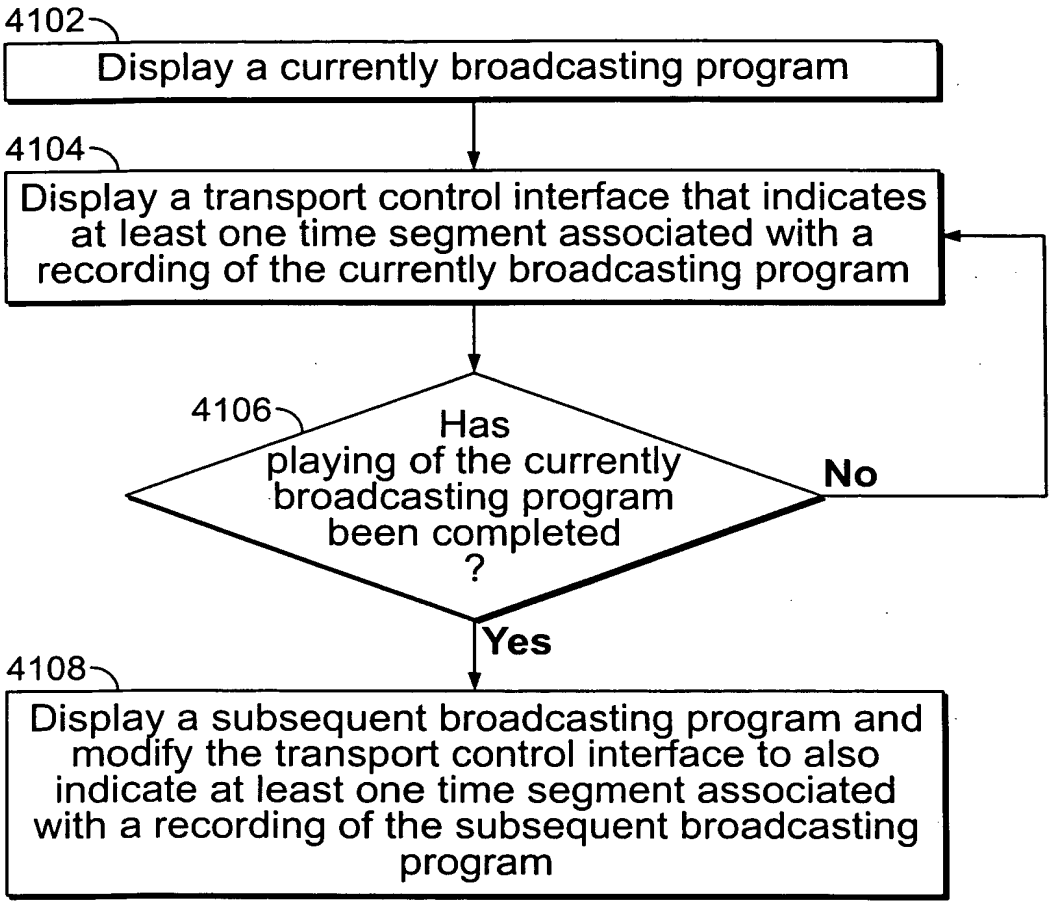

4102
Display a currently broadcasting program
4104
Display a transport control interface that indicates at least one time segment associated with a recording of the currently broadcasting program
4106
Has playing of the currently broadcasting program been completed ?
No
Yes
4108
Display a subsequent broadcasting program and modify the transport control interface to also indicate at least one time segment associated with a recording of the subsequent broadcasting program

FIG. 41

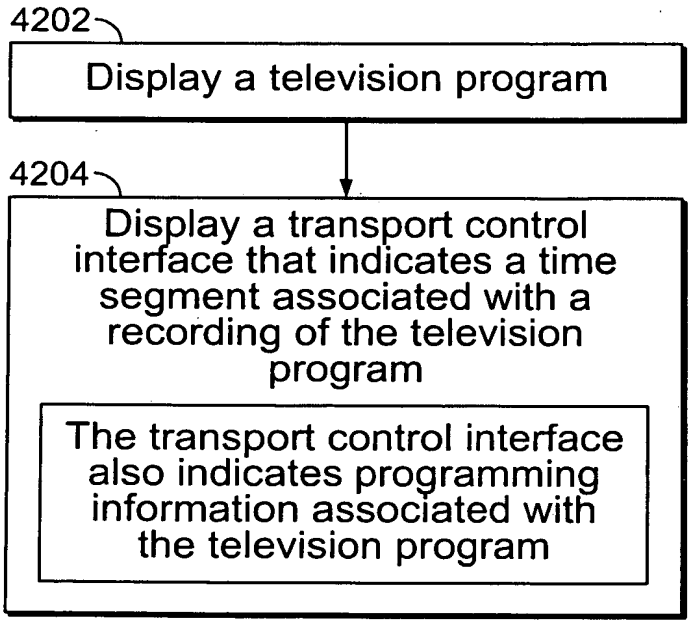

4202
Display a television program
4204
Display a transport control interface that indicates a time segment associated with a recording of the television program
The transport control interface also indicates programming information associated with the television program

FIG. 42

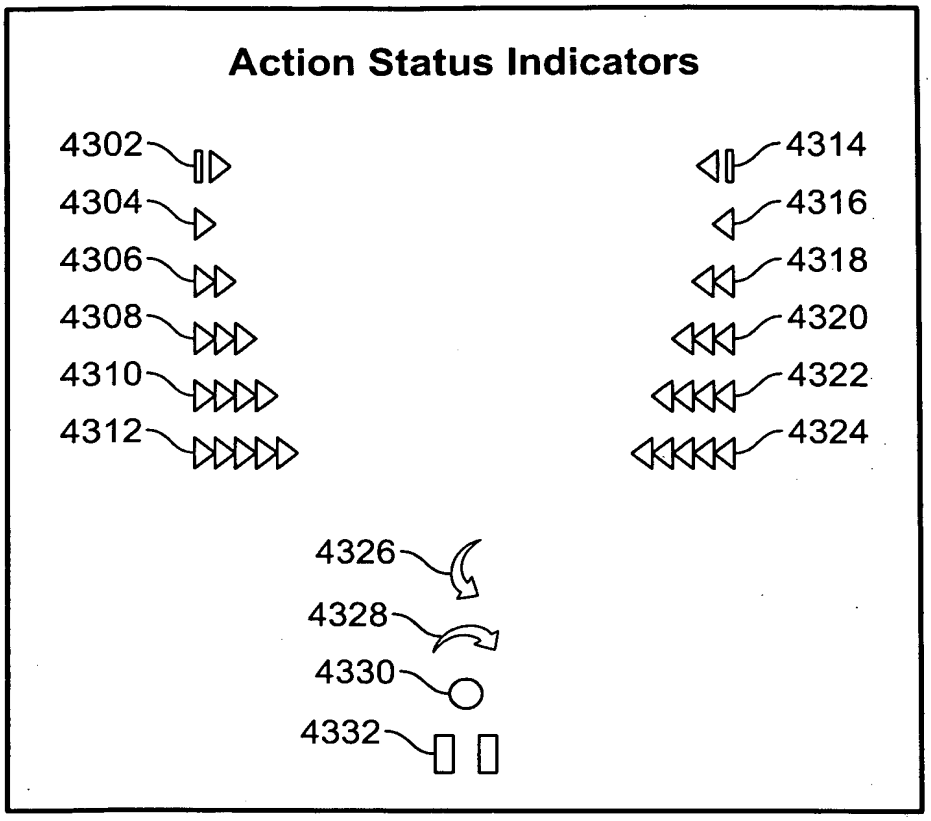

Action Status Indicators
4302
4304
4306
4308
4310
4312
4314
4316
4318
4320
4322
4324
4326
4328
4330
4332

FIG. 43

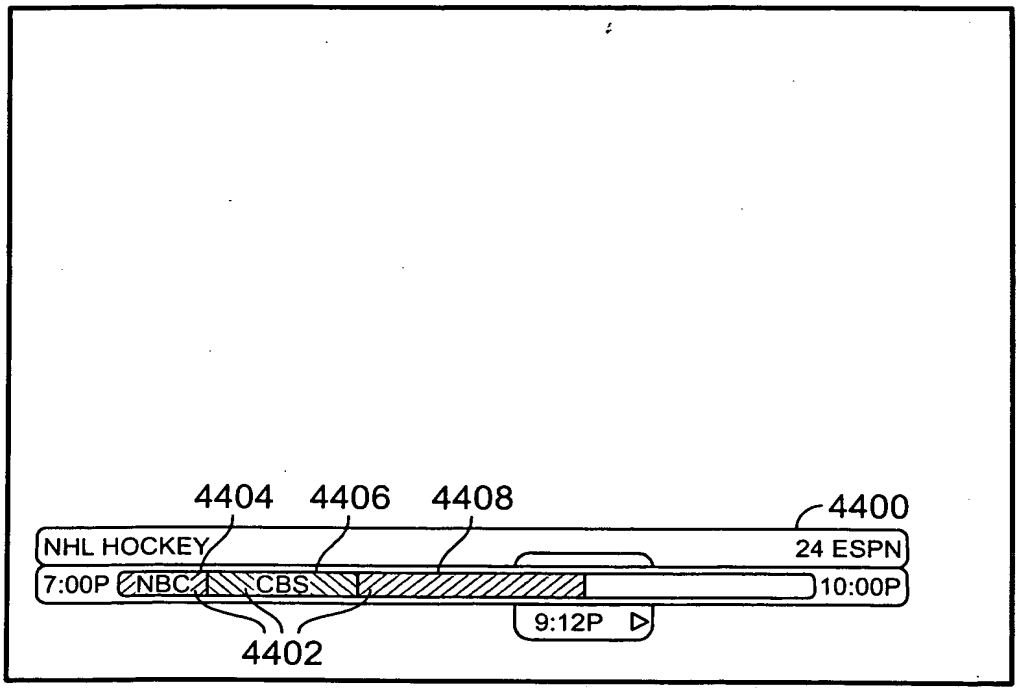

4404
4406
4408
4400
NHL HOCKEY
24 ESPN
7:00P
NBC
CBS
10:00P
9:12P
4402

FIG. 44

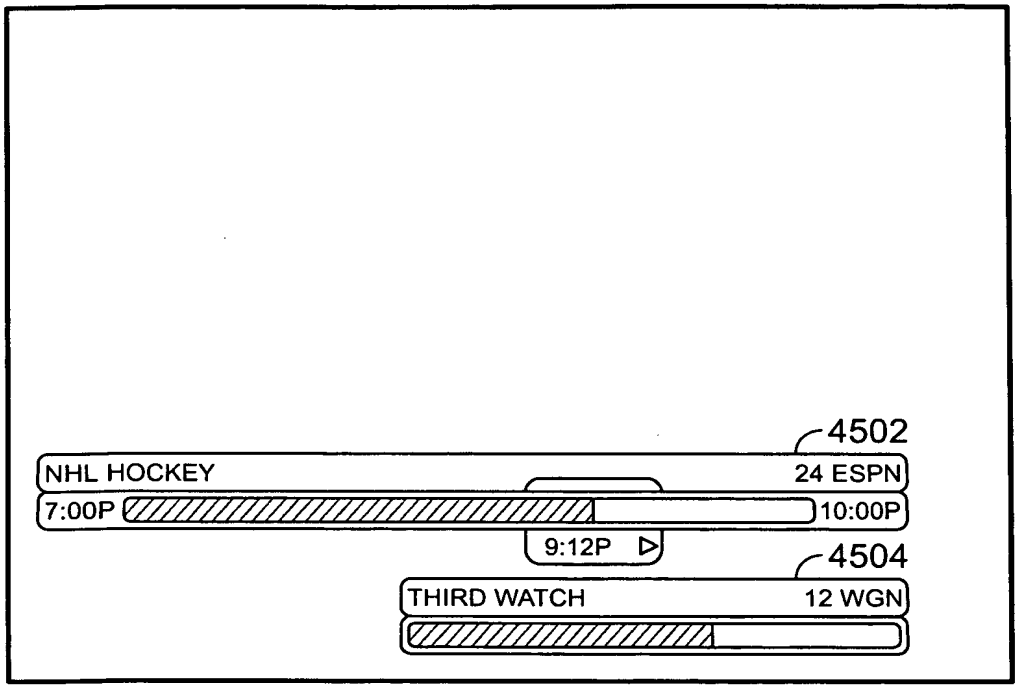

4502
NHL HOCKEY
24 ESPN
7:00P
10:00P
9:12P
4504
THIRD WATCH
12 WGN

FIG. 45

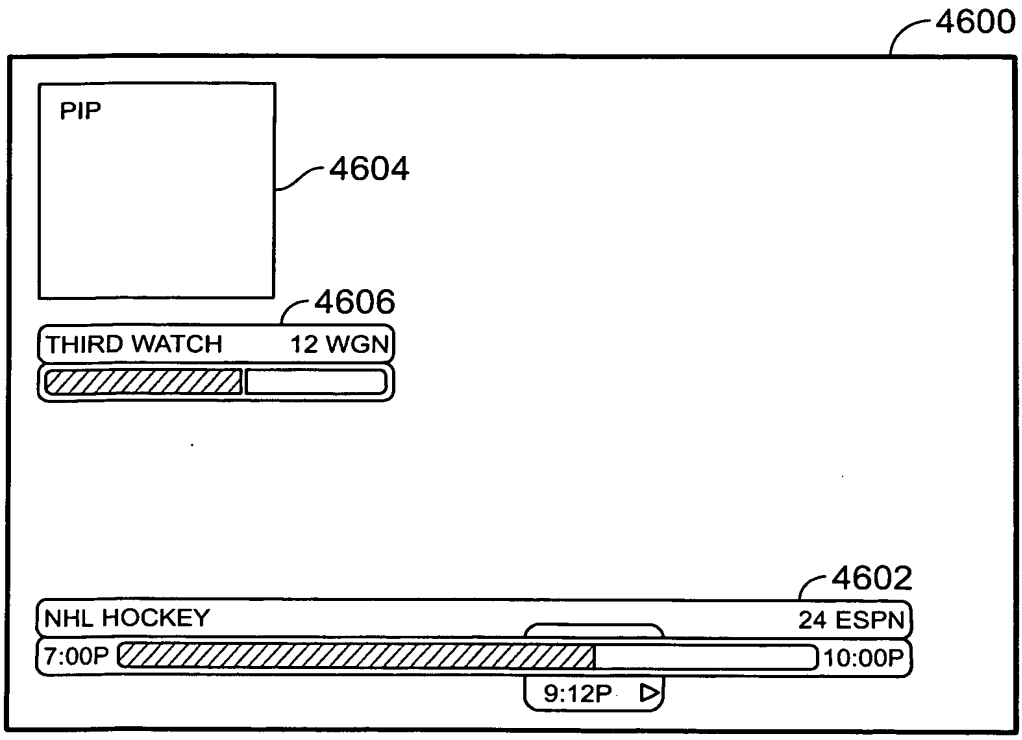

4600
PIP
4604
4606
THIRD WATCH
12 WGN
4602
NHL HOCKEY
24 ESPN
7:00P
10:00P
9:12P

FIG. 46